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CAN MOTHERHOOD BE MADE SAFE?

MOTHER'S DAY 1938 finds us still living in a country which—by whatever statistical procedure may be used to assign cause to maternal deaths—has a high mortality rate compared to any other country of the civilized world. But things are happening at last, after a quarter-century during which our death rate for the country at large has remained practically static despite all our growth of public health programs.

Since the passage of the Social Security Act on August 14, 1935, a division of maternal and child health with a medical director in charge of the program has been organized in every state, Alaska, Hawaii, and the District of Columbia. These programs, which are subsidized by federal funds allocated by the United States Children's Bureau, are making possible better facilities for antepartum, confinement, and postpartum medical and nursing care of mothers. True, the funds provided are woefully inadequate in relation to the need. But it is a step in the right direction.

In January of this year a nationwide conference of leaders of professional and lay groups met in Washington at the call of the Children's Bureau to discuss a practical program for the reduction of our maternal and infant deaths. Facts were frankly faced: insufficient and often incompetent medical, nursing, and hospital care; economic underprivilege of the third of the population which is having the most children; a total lack of facilities for large numbers of rural women. The problem is outlined with clarity and forcefulness in Dr. Martha M. Eliot's paper at the conference, published in this issue. The poignancy and terrific pressure of the need are expressed in a letter from one of our readers on page 337.

One definite plan emerging from the conference was the Findings Committee's recommendation of the need for an amendment of Title V, Section 502, of the Social Security Act to authorize the appropriation of a larger sum annually to the states for maternal and child health services, sufficient to provide proper care of mothers who cannot have such care because of economic need or inaccessibility to facilities for care.

While the enthusiasm of the conference was still warm, a meeting of its "continuing committee" was called in Washington on March 12, and the representatives of 61 organizations formed themselves into a permanent National

Committee on Better Care for Mothers and Babies to carry on the work started by the conference. (See page 334.)

On the heels of this meeting there was released to the public the report of the President's Interdepartmental Committee to Coördinate Health and Welfare Activities (page 271) which emphasizes the inadequacy of our maternal and child health program.

IN THE MEANTIME we are belatedly mending our own fences. With maternity nursing admittedly one of the most neglected parts of the basic preparation of the nurse, nursing leaders are working earnestly to the end that intelligent, safe maternity nursing shall be the rule and not the exception. The basic maternity course in the new *Curriculum Guide for Schools of Nursing* published by the National League of Nursing Education in 1937 has been radically revised to include the entire maternity cycle. But no course can be better than its teachers. The Maternity Center Association in New York City, whose institutes in 42 states during the past nine years have reached 15,000 nurses, is now conducting a course in connection with Teachers College, Columbia University, for intensive postgraduate training of supervisors and teachers. It is hoped that the preparation of these young women for the teaching of high standards of maternity care will be a great step in the direction of safe maternity nursing.

This magazine has increased its material on maternity nursing during the past two years in response to the increasing interest in this subject, and has published since December 1936 a regular column—"How Would You Answer These?"—for the discussion of questions and problems on maternal welfare.

Dare we hope that at long last a nationwide awareness of the problem will result in a practical program for its solution? P.P.

WHAT DO OUR READERS SAY?

"I WISH you would publish more practical material on maternity nursing, simply told, so that the busy field nurse can apply it to her job," commented a state nursing consultant recently.

"I wish you would publish more results of studies and material on current trends in the field that are of interest to our students," said a director of a public health nursing course.

"I wish . . . . ."

The editor wishes that every mail brought such comments from our readers as these. Unfortunately they are all too few. Is it because we are traditionally and by our very training a non-vocal group, accustomed to accept uncomplainingly whatever is offered us, that the reader-response from the field is so meager? Whatever the reason, it is true that we seldom have unsolicited comments from readers; and that when they do come they are rarely specific enough to serve as a guide in planning the contents of the magazine.

Praise is of course always appreciated. (Who of us does not respond warmly to sincere compliments?) But more definite comments are of inestimable value. If you like the magazine, what do you find helpful? Is there any way in which it could be made more useful? If you don't like it, how has it failed to meet your needs? What particular articles did you agree with—or disagree with? What ones stimulated your thinking and studying?

We are particularly eager to have an expression of the thinking of our readers regarding questions that are raised by articles, editorials, or book reviews—or indeed regarding any significant problems in the field of public health nursing.

To this end we are starting a new column this month, "Our Readers Say . . ." which appears on page 337. We are publishing as the first reader-comment in this column a letter which was prompted by the editorial "Better Care for Mothers and Babies," in the February issue. We are sure that this letter will find an echo in the thoughts of many of our readers. The new column will be published monthly or intermittently—depending on you! We hope that it will become a lively open forum for the expression of reader-opinion.

"THE NEED FOR A NATIONAL HEALTH PROGRAM"

EVERY ONCE in a while an important report comes to our field which should be read by every public health nurse and every board and committee member. Such a report is that entitled "The Need for a National Health Program," prepared by the Interdepartmental Committee to Coördinate Health and Welfare Activities.* (Reviewed on page 332.)

While the whole report should be read, the sections covering the needs in the field of public health nursing are particularly pertinent and might well form the subject ot a staff meeting or joint staff and board discussion meeting. Some of the questions raised in our field by this report concern the preparation of the nurse for public health, better distribution of her services, and the development of intensive programs in certain special areas—such as maternity and child health.

It is especially gratifying to see that industrial hygiene has received marked attention, especially the problem of the health of the workers in small industries.

At the moment there is considerable discussion of the various points covered in the Committee's report. It behooves public health nurses to keep an open mind toward its message, remembering that things are in a state of flux and that the service of the public health nurse must continue to be—insofar as possible—available to all without regard to economic status, that it must be under medical supervision, and that it should be representative of the best we know in standards of nursing care and health instruction. D.D.

*The Need for a National Health Program. Report of the Technical Committee on Medical Care, Interdepartmental Committee to Coördinate Health and Welfare Activities, Washington, D. C., 1938.

Home Care of Poliomyelitis Patients

By JESSIE L. STEVENSON, R.N.
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It is important that both family and patient understand what to do and why, if the patient is to have the opportunity for the maximum amount of recovery

THE FIRST home visit to the family of a child who has been sent to the hospital with acute poliomyelitis is of crucial importance. One cannot overestimate the importance of this visit in winning the coöperation of the family. The mother has a special place in her heart for "the first nurse."

One mother who inquired about her first nurse months later commented, "I'll never forget her. I was worried sick when Shirley was sent to the hospital. Then Miss Lawes came and she made it all plain to me."

"She made it all plain to me!" What finer tribute to the teaching of a public health-orthopedic nurse. In most instances, the nurse finds the family eager for the information and advice. The very words *infantile paralysis* strike terror to the hearts of parents, for to most of them they are inseparably associated with crippling and deformity. Much reassuring information can be given to them.

"WILL MY CHILD BE A CRIPPLE?"

The question asked most frequently is, "Will my child be a cripple?"

We cannot promise how much recovery there will be but we can say that deformity is usually unnecessary and that in nearly all instances it means neglect. We can explain that the entire future of the child will depend upon the care which he receives in the first few months. The importance of rest should be mentioned at the time of this first visit and the application of this principle should be demonstrated later when the child comes home. It should be explained that rest for the infantile-paralysis patient means something very different from rest for the child who is recovering from measles or scarlet fever. Rest means support of the weak muscles in positions that will not permit them to be stretched.

It will comfort the family to know that within a few weeks after the acute stage of the disease, the patient will feel well physically and will have no pain. However, if he should have paralysis, it can be explained that his muscles are "sick" and that they may need rest for many months if they are to have a chance for as much recovery as possible.

PLANS FOR LATER CARE

Plans for medical care when the patient returns from the hospital should be discussed on this visit. If the family have their own physician the nurse should take his name, address, and telephone number so that she may get in touch with him as soon as the patient comes home. If the family are unable to pay for private care, the nurse should be familiar with the facilities of the community for clinic care, in order to know where to refer them.

The nurse needs to gain a complete picture of the health and social history of the family in order to help them plan more wisely for the care of the patient. The parents usually have countless questions to ask, and if the nurse is

genuinely interested and friendly she inspires confidence and allays their troubled fears.

RULES PENDING FURTHER ORDERS

It is not possible to give much detailed advice on this first visit since we do not know how much involvement the patient has. The following are safe rules for the care of all patients upon their return from the hospital, pending orders from the physician:

1. Tell the mother to put the child to bed until he has been examined by the doctor.

2. Put boards under the mattress so that it will not sag and the body will be in a straight line.

3. Place a box against the feet to hold them at a right angle. The box should be high enough to keep the covers from pressing on the toes.

4. If the shoulder is weak, prop the upper arm at a level with the shoulder.

5. Keep the child warm.

Sometimes the mother greets the nurse joyfully on this first visit with the announcement, "But, nurse, he isn't paralyzed, it's just a weakness."

We are glad to rejoice with her. But we must go on to explain that this is all the more reason why her child should have rest and protection for his weak muscles since he probably has a chance for complete recovery with treatment. Patients with "just a weakness" may develop some permanent disability if they are allowed to sit or stand too soon. No one would expect a child of five to carry the same load that an adult could lift with ease. Weak muscles following a mild attack of poliomyelitis should not be allowed to carry the load of a normal muscle until they are ready for it. Danger signals of muscle fatigue are even more important in the mild cases because they are so often overlooked.

The family should be told how to call the nurse when the patient comes home from the hospital. Many pamphlets on infantile paralysis written for lay people are available and the nurse should have some literature which has been approved by the organization she represents, to leave in each home.

WHEN THE PATIENT COMES HOME

On the first home visit after the patient returns from the hospital the nurse teaches the mother certain important things about his care. There is one rule which applies to every detail of bedside care: *Never put the weak muscle on the stretch.* If the patient has not yet been seen by the physician who is to be responsible for his future care, the nurse may only demonstrate improvised means of supporting the trunk and extremities in positions that will prevent stretching of the weak muscles. Since the patient often has too much muscle tenderness at this time to permit a detailed examination by the physician to determine the degree of weakness, the neutral position is usually maintained.

A box, a suitcase, a rolled blanket, or a hard pillow may be used to support the feet. A small bathtowel may be folded and placed under the knees to give support to the joints and to prevent back-bending. Sandbags, rolled pillows, or a tightly rolled blanket may be propped against the outside of the legs so that they will not roll outward. The legs should be placed slightly apart. Boards should be placed under the mattress so that the trunk will be in a straight line.

POSITION OF ARMS

If the deltoid muscles are involved, the arms should be kept constantly at shoulder level. A sling may be made of a folded towel. The arm from the shoulder to the elbow should rest in this sling and the towel is pinned to the head of the mattress. (Fig. 1.) Several variations of this position are possible. The elbow may be bent or straight, the forearm in the position of pronation (palm down) or supination (palm up). The shoulder may be in the position of

Figure 1

Temporary support for arms and legs

outward rotation (elbow bent, hand pointing toward head of bed) or of inward rotation (elbow bent, arm at shoulder level, hand pointing toward foot of bed.) These positions of variation should be changed several times a day so that the muscles will not become contracted in any position and so that beginning fibrosis around the joints will be prevented.

There is one position that must remain constant, however: The upper arm is always kept at a level with the shoulder. The mother should be shown how to change the child's gown without allowing the arm to drop. The hospital type of gown is better for patients who have arm involvement. If the shoulder tends to sag backward, a pad may be put under the arm just above the elbow to hold the shoulder forward. This is especially advisable if the pectoral muscles are weak. (These muscles draw the arm forward across the chest.)

MOVING AND TURNING PATIENT

On the whole, it is wiser to move the patient as little as possible. The mother should be shown how to turn him on his side in order to relieve pressure on the back, and how to give him the bedpan without stretching his weak muscles.

In order to turn the patient on his side, place firm pillows or folded blankets parallel with the entire length of the body. One person supports the upper leg at the ankle and just above the knee, while another person supports the patient at the buttocks and the shoulders. Gently turn the patient, resting the upper leg and arm on the pile of pillows or blankets. Carry the upper leg slightly forward from the hip in order to avoid pressure on the lower leg. If the abdominal muscles are weak and the pull of gravity causes them to sag, place a firm pad against the abdomen for support.

If the arm is involved, it is usually better to turn the patient so that the affected arm is up, since pressure of the body on the shoulder is likely to be painful. During the sensitive stage when movement of the arm across the chest at shoulder level is painful, the pillows should be built up higher so that the arm will not come too far forward—thus stretching the muscles at the back of the shoulder. The person who supports the upper part of the body should support the arm at shoulder level during the process of turning. If the patient's opposite arm is normal, he may be taught to do this. If both arms are affected, turn the patient toward the stronger side.

PUTTING PATIENT ON THE BEDPAN

The main point in putting the patient on the bedpan is to keep the entire body in a straight line and to give support to the joints whenever the patient is moved. Use as low a pan as can be obtained. Various methods have been used. The following one works with a minimum of discomfort in many cases.

Turn the patient on his side as described above. Place the bedpan in position. Place a folded blanket above the pan to support the trunk at that level and below the pan to support the lower legs. Gently turn the patient back on to the pan. His body should be in a straight line and the support for the feet should be in place.

If the patient has been sent home from the hospital in bivalved casts or splints, these should not be removed when he is put on the pan. It is a good idea to have the mother practice turning a normal child in these positions so that her technique may be perfected before she tries it on a helpless patient.

If the patient has extensive muscle involvement and extreme muscle tenderness, the mother should be cautioned against rubbing the skin vigorously when the sponge bath is given. The patient may be moved about in bed with less discomfort if he lies on a drawsheet which is lengthwise under the body.

No further instructions than these should be given until the nurse can get in touch with the doctor for specific orders.

TAKING CHILD FOR EXAMINATION

If the child must be taken to clinic for examination after his return from the hospital, the parents should be instructed how he may be transported without damage to his weak muscles. A small child may be placed on a tableboard, padded with a blanket. A box may be used to support his feet. If one or both arms are involved, a board should be obtained which is wide enough to support the upper arm at shoulder level. Older patients may be transported on a board placed lengthwise of the car.

The nurse should caution the parents against allowing the patient to sit even for a few minutes before the doctor has made a detailed examination of the back and abdominal muscles, as well as the muscles of the buttocks.

The physician's orders for care during the first few weeks or months from the acute stage until muscle tenderness has ceased and massage and exercises are begun are usually:

1. Rest in bed in the recumbent position.

2. Support of the affected muscles by means of casts, frames, splints, or braces.

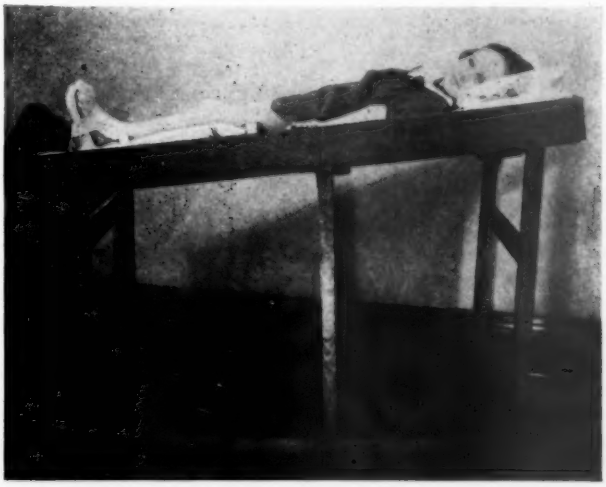

Figure 2

Portable adjustable cart for daytime use

3. Warm baths or some form of heat to relieve muscle soreness.

Massage or exercises are never given until all muscle tenderness has entirely disappeared.

TEACHING THE FAMILY

The care of poliomyelitis patients is a twenty-four-hour-a-day job, so it is important that both patient and family understand what to do and why, if the patient is to have the opportunity for the maximum amount of recovery. Frequently the value of conservative treatment is underestimated because it has never been tried. The nurse has her greatest opportunity for teaching during these first weeks. She must interpret the orders of the physician to the family and help them plan to make adaptations in the home situation so as to carry out orthopedic treatment.

It is very important to include the father in the plan of instruction. Some of the most effective pieces of home apparatus have been constructed by fathers, uncles, and grandfathers. The entire family is anxious to do something immediately. They are likely to feel that this period before massage and exercises are begun is marking time. Give them something to do and they will not have time to hunt up quacks.

ADAPTING THE HOME FOR CARE

One important thing to save back-breaking strain for the mother as well as for the nurse is to elevate the bed to a convenient height for giving bedside care. This can be done by placing an ordinary bed or crib on high four-by-four blocks of wood. If it is desirable to move the bed about, the legs of the bed may be firmly anchored in the blocks of wood and castors put in the bottom surface of the blocks. A simpler method is to place larger blocks between the board which is under the mattress and the springs. This method elevates the patient, yet permits moving the bed freely.

Rest in bed in the recumbent position does not mean that the patient must be kept in the bedroom at all times. Small children cannot be kept in the lying down position without some form of restraint. A straight Bradford frame is often ordered by the physician, and it can be made by the father. Simple ones have been improvised of wood with a footboard high enough to extend beyond the splints. The child on a frame may be carried to any room in the house. He may rest on top of the kitchen table, on a bench in front of the window, or on the porch. He may be taken outdoors on top of a coaster wagon. The frame may be tilted at an angle, allowing the child to look about the room more easily, provided it is always in a safe position.

PORTABLE CARTS

Portable carts have proved very satisfactory for older children and adults. These are more satisfactory if they are made the same height as the bed which has been elevated, since less lifting of the patient is required. (Fig. 2.) A padded board may be placed between the bed and the cart, and the patient rolled on to the cart. The cart should be narrow enough to be wheeled through doorways. If this width does not support the splinted arms properly, drop-leaf shelves may be attached. These can be lowered when the cart is wheeled through doors. Many carts are made adjustable so that the entire top of the cart tilts like a back rest. The body remains in a straight line, yet the patient's head is higher than his feet. This variation in position enables the patient to read and eat his meals more easily.

There are many varieties of portable carts. Some have been made by attaching a wooden box with a footboard to an ordinary baby buggy. A wooden box similar to a coaster-wagon top may be attached to the framework of a discarded baby buggy. (Fig. 3.) If the carriage seems unstable, a third set of wheels

may be added. Children five or six years of age can use this type, which can be wheeled outside easily.

Most of the larger carts are made of wood. One father ingeniously constructed one of gas pipe with a wooden box top. A tray which could be adjusted to be used as a reading rack was attached and was made removable. A discarded bakery cart was remodeled to give one boy many happy hours. It is helpful for the nurse to carry pictures of two or three different types with her. The father seldom makes an exact copy. He frequently adds gadgets which improve on the original model. In this way we gain new ideas to pass on to other families.

SPLINTS

The physician usually orders splints for the support of the affected muscles. The cost of splints is a big item for a family of moderate income. Improvised wire arm and leg splints may be made by the nurse or by the family under the instructions of the nurse. References which contain complete directions for the making of these splints will be listed in a second article on this subject.* The type of splint is of course ordered by the doctor and is always approved by him when it is completed.

Two muscles of the thumb deserve special attention because of their importance in functional use. These are the opponens pollicis and the abductor brevis pollicis. They abduct the thumb at a right angle from the palm and hold it in the position of opposition to the little finger. Without these muscles, it is difficult to pick up a glass of water, to hold a pencil, or to sew. Usually a splint is ordered to hold the thumb in the desired position. A temporary support may be provided by bandaging the thumb in this position. A figure-eight loop is made, applying pressure on the back of the first joint of the thumb and drawing it toward the little-finger side of the hand.

CHANGING POSITIONS

Correct positions for the muscle weakness of each patient should be demonstrated to the mother—back-lying, face-lying, side-lying—with splints on and splints removed. It is not enough to show the mother all these details. She should demonstrate back to the nurse to make sure she has gotten each point. It is especially important that she know how to remove and apply the splints so that they fit properly at all times.

Care should be taken not to stretch

*A second article by Miss Stevenson will be published in the June issue.

Figure 3

Improvised bed cart for outdoor use

the muscles in front of the ankle when the child is turned on his face. Slide the child to the foot of the bed so that when he is turned over, his feet will project through the bars at the foot of the bed and will remain at a right angle to the lower leg. This may be done with the splints on or removed. If they are removed, a small pad just above and in front of the ankle will prevent pressure on the ankle and relieve any tension on the knee. If the abdominal muscles are very weak, a pad should be placed under the abdomen to prevent stretching. The patient should not be permitted to prop himself up on his elbows even though his arms are normal as this causes stretching of the abdominal muscles and tends to develop a hollow back.

Another face-lying position is to bend the patient's knees and place a pillow or blanket roll above and in front of the ankle so that the feet are in a position of right angle to the lower leg. The first method is preferable if the knee extensor muscles are very weak.

If the patient is on a straight Bradford frame, he may be turned on his face with his feet over the edge of the foot of the frame, provided the frame is elevated on blocks of wood. The frame should be elevated high enough so that the toes do not press on the bed.

When the patient is lying on his back on the frame thus elevated, he may be given the bedpan without changing his position, provided there is an opening in the covering of the frame. (Fig. 4.)

TO RELIEVE MUSCLE TENDERNESS

Warm baths help to relieve muscle soreness. The same principles in regard to support of the affected muscles apply when the bath is given. If the child is too large to give adequate support to the affected muscles in the tub, a tank should be used. The technique of giving tub and tank treatments will be described in a second article. If it is impossible or impractical to give tub or tank treatments, hot moist applications to the back and extremities give considerable relief.

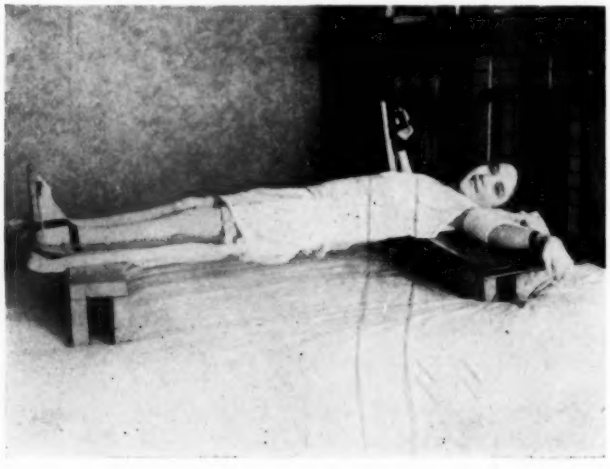

Figure 4

Bradford frame elevated on blocks of wood. Leg, arm, and hand splints

(To be continued)

Psychological Aspects of Tuberculosis

By MARY B. EYRE, R.N.*
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What can psychology offer to speed the recovery of the tuberculous patient? Suggestions of vital significance to the nurse are made in this article

THE APPROACH to the subject of tuberculosis from the psychological side is of especial interest to nurses, because it is an approach with which they have had actual acquaintance. It is the human, emotional, life-as-it-is-lived side of the therapeutic problem which the nurse experiences with the tuberculous patient day by day for months and sometimes for years.

The scientific aspect of psychology in relation to chronic illness is just beginning to be recognized, and furnishes a fruitful field for nurses to study. But when it came to making a choice whether to emphasize the scientific or the human-interest aspect of psychology in this article, the author was pulled in both directions, belonging, as she does, to the fields both of nursing and of psychology, and being herself an old "T.B." and a "cure"!

Perhaps it was due to the latter combination of facts rather than to either of the former that it was possible for the writer to gain the confidence of patients in a large tuberculosis sanatorium where she was asked to do some psychological investigation. The psychological law of *suggestion* was undoubtedly at work in the minds of the patients, as were also *sympathy* and the ability to enter into the bodily feelings of another person, which is termed *empathy*, when they witnessed a hale and hearty individual who could say: "I had tuberculosis for four years and recovered, so it may be possible for you to recover also."

The purpose of the investigation* was to discover what mental hygiene and psychology could offer in speeding the recovery of tuberculous patients by establishing better mental attitudes, and also to determine the specific emotional factors found clinically in tuberculosis. There is a widely accepted notion that the emotional instability of the tuberculous patient is due to the specific toxin of the disease. There is as yet no scientific evidence to support such a view.

It will be seen that the implications of a study of the psychological aspects of tuberculosis reach further than merely obtaining facts about patients; further, even, than directly affecting the lives of the patients studied. Principles are revealed which lead to a greater understanding of others under similar conditions. And here we have the core of scientific method, which requires that phenomena shall be observed and reported; that a hypothesis shall be formed on evidence from the data obtained; that a technique shall be devised which can be carried out with the same sort of phenomena, under similar condi-

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*Eyre, Mary B. "The Role of Emotion in Tuberculosis." *American Review of Tuberculosis*, April 1933, pages 315-329.

tions; and finally, that the procedure can be verified by others through obtaining the same results.

If these primary rules of scientific method are obeyed, we shall be able to follow the path offered by psychology in the field of tuberculosis to the end which is the goal of all pure science, namely *prediction* and *control*.

LOSS OF EQUILIBRIUM

The condition of the tuberculous person is one primarily of loss of equilibrium—first of his body chemistry, and then of his family situation, his job, and his whole mental attitude. A financial problem is almost inevitably present. All of the patient's human relationships are shifted. The husband or wife, the parent or child, the lover or the beloved, the friend, the business associate, the employer or his subordinates—all take on a different aspect. The patient must think differently not only of them, but of himself. He must literally make himself over.

This can only happen gradually, through the continued responses made to the new situation. Our personalities cannot be changed overnight, but they are built up by using our various abilities, just as muscles are developed through exercise. The abilities are ours by inheritance, but what we do with them is our own responsibility. No magical power from the outside can do for a man what he himself must bring about. Psychology can help him to learn how this "will to live," as William James once called it, can be used to help and not to hinder.

One of the first points in understanding the patient is to understand his emotional life. Emotion is a moving force. Energy is implicit in the very word, whose root is the Latin for "I move." Woodworth has defined emotion as "stirred-up feeling."* Since it takes energy to stir anything up, and since energy in the organism means increased metabolism and discharge of nervous impulse, we can readily see that emotional states lead to activity of the organism *somewhere*, either externally or internally.

What if activity of body be curtailed, as in tuberculosis? What if it be prohibited for long periods of time, while causes for emotional disturbance multiply with the passing months? Energy then is discharged in worry, in fretting, in nervous tension, in mental restlessness and irritability, sometimes in states of apprehension and anxiety.

THE PATIENT'S CHEERFULNESS

The "euphoria," or apparent well-being, which so often accompanies tuberculosis is frequently a cloak for hidden fear; the exaggerated cheerfulness is what the psychologist calls a "compensatory mechanism." In the author's experience, it is usual to find on probing beneath the gay and hopeful exterior of the tuberculous person submerged feelings of dread and despair which he has repudiated and of which he is himself unaware.

Psychology calls these unacknowledged feelings "dissociated states," which are in turn the basis of a "complex." It is not necessary to posit a mysterious "subconscious" or an "unconscious" mind to explain these feeling-states which we do not recognize. They are understandable by everyone who has experienced "the blues" without knowing why, until he traces back his feeling, step by step, and comes to some chance word or happening which has lessened his confidence in his own ability or in his own ideals of himself.

The answer to emotional problems is, in brief, first to recognize the emotional source or cause of the disturbance, and then to use the released energy in some way which will bring full satisfaction. For the tuberculous patient, achievement is far more difficult than it is for

*Woodworth, Robert S. Psychology: A Study of Mental Life. Methuen & Co., London, tenth edition revised, 1935.

the healthy individual. He is, moreover, denied the ordinary relief of moving from place to place, with its variation of social contacts, and the help of a change of occupation by which pent-up restless feelings may be worked off.

Unless the specific toxic effect of the tubercle bacillus upon the affective state of the patient can be proved, it is probable that his persistent hopefulness is a psychological protective device which should not be taken from him.

All of us need some central stabilizing influence to which we can refer the meaning of our lives. Religion is such a stabilizer, and its therapeutic influence may be utilized.

The writer asked a patient who was failing to make the progress which his prognosis indicated and who stated that he did not expect to get well, whether religion would not be of some help to him. "No," replied the man, "I figure there is nothing in it for me. I heard of something called psychology which might work, and sent for some books. Would you like to see one of them?" With that, he pulled out a current text on psychology, and opened to an illustration of the spinal nervous system. The story of this man was that his life was a failure. He stated that his wife had divorced him; his only child, a little girl whom he had not seen since the divorce twelve years earlier, was estranged; his partner had sold out the business and decamped with the proceeds; and he himself was now dependent on charity. Nothing remained for him but to go over these dismal facts, like a creature on a treadmill.

It is essential that psychology students should be acquainted with the nervous system, but the author made a vow then and there that psychology must do more for the solving of life's problems than to offer a stone in place of bread!

The daughter of this man was found, and in due time proved ready to visit and comfort her father. His faith in himself was in some measure restored; his irritability with the ward nurses (who had alluded to him privately as "an old crab") disappeared; and best of all, his physical condition began to improve! His pent-up emotional tension was released and its energy put to other uses than finding fault with the nurses and brooding over his troubles.

Psychology is valuable, therefore, in understanding emotions and how to deal successfully with them if they become exaggerated. One of the most potent emotions is *fear*. Its results may be seen clinically, as for example, in restlessness, loss of sleep, dilated pupils, disturbed digestion, secretory changes, and even in some cases increased blood pressure and temperature. Dr. Walter B. Cannon of Harvard University* has shown that the bodily effects of fear and rage involve increased activity of some of the endocrine glands, notably the adrenals, which in turn are innervated by the sympathetic division of the autonomic nervous system. Thus it may readily be understood that ideas and effective states can act directly upon the body.

This is further demonstrated by the recent evidence from the work of Carmichael, Travis, Jasper, Brown, and others, with reference to brain waves and other electrical body currents.**

"EVERYTHING FINE?"

One of the most practical ways of aiding persons who are emotionally disturbed is to give them the opportunity to talk as freely and fully as they wish, to someone whom they trust. Too often the busy nurse and doctor after the physical inspection say to the patient: "Well, how are you today? Any complaints? Everything fine?" and pass on

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*Cannon, Walter B. *Bodily Changes in Pain, Hunger, Fear, and Rage*. D. Appleton-Century Company, New York, 2nd edition, 1929.
Ibid., *The Wisdom of the Body*. W. W. Norton and Company, New York, 1932.

**Summarized report in *Science News Letter*, December 26, 1936.

without pausing to hear something which the patient might hesitatingly bring himself to tell. Certainly you and I would not choose such a moment in which to unburden our deepest anxieties.

A comment from chronic patients which is strikingly significant of the usual haste of nurse and doctors is the one often heard by the psychologist: "You don't know what it means to be able to talk to someone *who has time to listen!*"

While much is being done through national, state, and local agencies for the prevention of tuberculosis and its early recognition when it does occur—especially among children and young people—there is no organized movement among such agencies for the use of mental hygiene or applied psychology.

During the years of adolescence the psychological strains of living increase, along with the social responsibilities incident to growing up. The boy or girl becomes "self" conscious, not only by being easily embarrassed (which is the sense in which the term is most often used), but by the new feeling of "selfness" which begins to appear in the average child at about the age of twelve, together with the ability to deal with abstractions as well as with concrete objects. He becomes capable of regarding *himself* as apart from the surroundings which he has hitherto accepted without question. He can and often does challenge the established order, beginning with home and parents and extending to the entire universe. This is a heady brew for the youngster, and in some instances it aggravates the emotional conflicts which an awakening sex life have introduced, until a veritable inner chaos is the result.

Studies in the psychology of childhood and youth are manifold. Psychology is recognizing more and more the need for helping people to face and solve their own difficulties. Such measures often apply more pertinently to human beings when they are ill than when they are in health. When we recall that tuberculosis attacks the adolescent with disastrous frequency, we see added reason for fortifying him with clear thinking, sympathetic understanding, and intellectual honesty. The person with tuberculosis must learn not only to control his emotions, but to use emotional energy constructively. Psychology teaches that instead of negation and denial, we shall use redirection of energy, and reëducation of the individual.

EDITOR'S NOTE: This is the second in a series of articles on various phases of the problem of tuberculosis, prepared by specialists in this field.

YOU ARE IN POOR MENTAL HEALTH IF

Worry interferes with everything you do.
You run away from things that are hard for you.
You are always making excuses for yourself.
You think you are always right and cannot see the other person's point of view.
You lack faith in yourself.
You have fits of temper or go round with a chip on your shoulder.
You avoid people—live too much within yourself.
You have no aim in life; you lack outside interests; you neglect your physical health.

YOU ARE IN GOOD MENTAL HEALTH IF

Your worries are passing.
You tackle your responsibilities and do the best you can.
You can admit your own mistakes and laugh at yourself.
You are tolerant of other people.
You have confidence in yourself and what you are doing.
You have control of your emotions.
You can form real friendships with people
You are trying to reach some goal in life.
You are constantly widening your interests
You keep yourself physically fit.

—From *The Health Broadcaster, Cook County, Illinois.*

Changing Concepts of Child Training

By DOROTHY I. ROBERTS
Mental Hygiene Supervisor, Visiting Nurse Association, New Haven, Connecticut

Recent studies point to the need for a greater flexibility in adjusting the child's regimen of living to his individual requirements and stage of development

THE FEEDING behavior of infants is the subject of a recent study which has some interesting and significant implications for nurses, parents, and others concerned with child care and training. Since it is impossible to isolate a single item of behavior such as feeding, from all the other patterns of living, the results of this study by Dr. Arnold Gesell and Dr. Frances Ilg* contribute to an understanding of other phases of infant behavior as well. Primarily, however, the findings are concerned with eating, sleeping, and elimination, and through them with the personality of the child as a whole.

This study is of particular interest not only because of its own unique contribution but also because of the correlation between its findings and some generally accepted principles of child guidance as applied to other phases of behavior. For instance, there are three concepts of child guidance of which the nurse has become increasingly aware for some time.

THREE CONCEPTS OF CHILD GUIDANCE

The first concept is that there is roughly a general standard of suitability of behavior for the various age-levels. Certain sequences of development are expected to occur. The infant turns, sits, stands, walks, and runs, in turn; and within limits, other factors being equal, we know about when to expect each type of response. Again, biting, pushing, and poking are expected of the two-year-old, but if the four-year-old persists in these responses we recognize that something is wrong.

This brings us to the second concept, that when undue deviation from the norm occurs the reason must be sought in the individual situation. So that our biting, pushing, poking four-year-old may be unhappy, under strain, lacking affection, "spoiled," under par mentally; or perhaps he has never had those usual experiences of a two-year-old through which he would have outgrown this type of behavior.

This introduces the third concept, which is that behavior obtained at the price of conformity from without rather than from evolution from within is not desirable. So instead of trying to enforce standards of four-year-old behavior, we attempt to understand the factors operating in this instance and offer to the child those experiences which will give opportunity for his latent developmental capacities to function. Or if those capacities are limited we cease to expect a more mature form of adjustment than is possible.

This in rough analogy is what Dr. Gesell and Dr. Ilg offer us in the results of their study as applied to the age-old problems of eating, sleeping, and elimination. They suggest that conformity from without is difficult, sometimes impossible, and that it only works well

*Gesell, Arnold, and Ilg, Frances L. Feeding Behavior of Infants. J. B. Lippincott Company, Philadelphia, 1937. Reviewed in PUBLIC HEALTH NURSING, January 1938, page 58.

and without disaster when maturity from within and the particular individual make-up are ready for the experience.

For years the nurse has been trained to help establish "good habits," which has meant regularity of sleeping, eating, and elimination. In the last few years there has been less rigidity to some extent. Many pediatricians and general practitioners are urging minor adjustments to suit the individual child. Aside from the usual shifts from a four-hour to a three-hour schedule or vice versa, there has been some moving forward or back of the specific hour that is causing difficulty.

Mothers have always made considerable adjustment. "He cried, so I just nursed him an hour ahead of schedule," or "I couldn't bear to wake him up, so he missed his two o'clock feeding and then when he woke up he was so hungry I gave it to him."

As a result of the research under consideration—if we are interpreting correctly—we have to draw the inference that the time of feeding and sleeping and training for elimination should depend upon the baby's own individual constitutional needs as expressed by his behavior.

FEEDING

When the baby awakes in the morning he should be started out on a three- or four-hour schedule, but if he cries for the breast or bottle earlier than the time designated, it should be given to him. If he does not awaken he should be allowed to sleep. The "secret" is that each baby will develop his own particular time-schedule, and this for him is best. The time will gradually be lengthened between feedings, perhaps one being pushed ahead so that it can be combined with the next. Nothing is static, however, for as soon as one adjustment is made a new one begins. Growth is constant and adaptations tend toward fewer feedings.

Some children make the transition from breast to bottle and bottle to cup easily. Some turn directly from breast to cup. Some cling to breast or bottle longer than others. This is much more dependent, however, upon development within the child than environmental handling, though the latter can complicate the picture. For example, a little girl twelve months old just will not give up her bottle. A month later she drops it of her own accord. Another child will cling to a bottle for twenty-three months and then abruptly abandon it.

Some infants nurse easily and successfully. Others cannot grasp the nipple or cannot swallow. This difference is largely due to individual neuromuscular differences in development. Here, too, the general sequences of development are much alike for all normal infants but there is great difference in rate of development and patterns of performance. Some infants take practically the same amount at each feeding; others vary the amount rather consistently with the time of feeding. On the whole, night feeding seems the best and it is suggested that the introduction of solids take place then. Infants are apt to be more experimental at this time. Some infants are equipped to handle solids at the age of twelve weeks; more at the age of sixteen weeks; and some not until later. If solids are not accepted when first tried, often they will be taken ten days or two weeks later.

SELF-HELP

The child's interest in self-help varies, but most babies can hold the bottle at the age of forty or forty-four weeks. When ready, they delight to try to feed themselves and they should have the opportunity to do so as it will further their development and build up self-confidence. But they should be given help when it is desired.

If playthings are utilized during the meal when the child is being fed, they should be tolerated. A spoon in one hand while feeding is going on may take

care of surplus energy and interest. If a change in position is desired it should be allowed. The child may stand up to eat for several weeks. All these manifestations are a part of the process of growth and will disappear in good time—and much sooner if adults do not try to control them.

CONTROL OF ELIMINATION

Most infants cry when wet or soiled, for the first twelve or sixteen weeks of life; then for several months they do not seem to care. But they will be troubled by this later on. Some children are again bothered by wet or soiled clothes as early as seven months of age, but this reaction is more apt to occur at the end of the first year. Also during this year, the neuromotor mechanisms which control the holding and releasing the contents of bowels and bladder are not sufficiently mature to function. Waking up from the nap dry is an indication of developing ability toward control. This is apt to occur the last part of the first year but the control is usually not definitely established until the age of thirteen to fifteen months. When this ability is really attained, a child's response to training is ordinarily immediate.

About this time, too, the child becomes keenly interested in puddles that he makes on the floor. Many mothers are upset by this manifestation, but such an attitude is unfortunate because the interest probably reflects the child's curiosity in all that pertains to him and his world—which is characteristic of the toddler age. This is a step in the learning process. He must recognize the puddle and its cause before he can recognize the signals of puddle-making. When he has come this far he may begin to take responsibility for himself. He may signify that he wants to go to the toilet. This may occur at the fourteenth or fifteenth month though it is apt to be a month or two later before he actually "tells." Often his telling suffers lapses, some of course caused by the emotionalism and overemphasis of adults, but some due to sequence of fluctuation accompanying natural growth, which characterizes any advance in eating, sleeping, or control of elimination.

After each "regression" the advanced behavior is more firmly established, until that behavior becomes the regression for still more advanced steps, or until sufficient adaptation is achieved in this field to allow the child's maturing capacities to function in some other field of personality development.

The child around eighteen to twenty-one months of age usually shows a feeling of guilt if he has urinated without "telling." Dr. Gesell and Dr. Ilg warn against increasing this guilt feeling through punishment or overemphasis. By the age of two a fair proportion of children are dry when they awaken in the morning. But lapses should be accepted even after the age of two and a half. "Training pants" may be a helpful tool if wisely timed with developing potentialities for control.

Because bowel movements are earlier regularized and less frequent they are easier to "catch." Those parents who succeed in keeping baby dry and clean at three or four or five months of age should not deceive themselves that the baby is trained, for control as such is impossible at this time. If such an attempt is made in these early months it should be made with moderation, without emotion or overemphasis. Infants seldom make known the need to move their bowels before they are nine months old and usually not until they are ten or eleven months old do they signify their desire by grunting or some such indication. Nor do they fuss if soiled. A real conscious effort to indicate need does not ordinarily come before a baby is sixteen months of age and even then the desire to urinate or defecate is seldom distinguished. At about twenty months the child can distinguish between the two needs and make his wants known verbally. Voluntary control is apt to

be correlated with this ability for verbal differentiation.

It would seem that the most practical contribution which this study makes to the public health nurse is the *point of view*. Much of the actual procedure falls within the province of the medical profession. For instance, the nurse cannot assume responsibility for establishing self-regulating schedules for babies. She can, however, through a careful study of the histories of the infants observed, learn the significance of individual differences, and she can therefore more intelligently understand and interpret a given infant's reactions. Also she can be quick to follow the lead of a physician who suggests less rigidity and more individual adaptation.

Above all, she can give reassurance to the mother who is worried and puzzled by the fact her infant is not weaned by the suggested month or does not conform readily to a specific feeding schedule. Also, many behavior manifestations long found difficult to control will now take on more meaning—the baby's tendency to put his fingers in cereals and vegetables, his playfulness and activity during meals, his erratic responses. All of these things can be seen in their perspective of growth and progress toward maturity.

WHEN SHOULD TOILET TRAINING BEGIN

It is to be hoped, too, that the nurse will modify considerably her conception of toilet training. It would seem that it is much wiser to begin training when the neuromotor mechanisms are capable of responding than to build up the child's resistance and bring about the mother's discouragement by urging futile attempts before that time. The concept of early training, however, is sometimes more ingrained in parents than in nurses. In these instances it would seem that the nurse with her broader understanding of underlying reasons could help the mother approach training—at whatever age attempted—with a clearer conception of what may be expected, a little less drive toward too early perfection, and a little less sense of failure and frustration if desired results are not obtained.

One would wish that all parents would be willing to wait until the cue is set by the child, both for bowel training—through his fussing or grunting before defecation—and for bladder training—through his waking dry from naps. Then one would also wish that the growing interest of the child in eliminative processes could be treated calmly with understanding and without moral connotations. This attitude, if the parent will also accept a certain amount of fluctuation without comment or censure, should insure successful mastery of the training for elimination.

All in all, a thoughtful consideration of this piece of research will give public health nurses much food for thought. The results of the study indicate that the three concepts of child guidance referred to at the beginning of this article should be as carefully weighed in the consideration of eating, sleeping, and elimination as in any of the other phases of the personality development of children.

GUIDE POST FOR BOARD MEMBERS

Important points in the home nursing care of an infantile paralysis patient are described on page 272.

A specialist discusses the preventive aspects of allergy on page 293.

The story of an interesting experiment in classes for expectant fathers appears on page 300.

What are we doing about our high maternity death rates? Pages 269 and 311.

What is a public health problem? Dr. Nathan Sinai discusses "Health as a National Asset." Page 287.

Every mother will be interested in the new trends in the training of babies. See page 283.

Health as a National Asset

By NATHAN SINAI, D.P.H.
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Public health begins a new march, over a terrain that is known to be difficult, toward new objectives and greater accomplishments

WITHIN THE PAST ten years, and more noticeably within the past five years, we have witnessed intensive efforts to obtain new knowledge concerning the relation of the medical sciences to national health. Out of the studies has come the conclusion that ill health is not a single element but rather a compound of causes—medical, social, and economic. While the causes themselves are not new, their intimate and interlocking relationships are only now becoming clear. Therefore, future efforts to conserve national health must be applied in at least three directions—medical, social, economic.

NEW "PLAGUE" ENTITIES

Out of the accumulations of data have come the clinical pictures of new "plague" entities that have replaced the plagues of the middle centuries. The old plagues were acute and explosive, but the results were specific. And once the wave of the epidemic passed, there was a period of freedom from danger. The new plagues present a different picture. Insidious in character, their action is chronic rather than acute, and their effect is to produce a slow disintegration of human fiber, both physical and psychological. The new plagues are generally classified under the title *insecurity*—meaningless perhaps as a word, but devastating as an experience. The subclassifications of insecurity may be characterized by the three questions that face a huge proportion of our population almost daily:

1. Am I going to have a job?
2. Granted that I have a job, will I be able, physically, to perform its duties?
3. Granted that I have a job and am physically able to perform its duties, will I be able to put aside enough of a competence to prevent want during old age?

In the passage of the Social Security Act, the main attention was directed toward the problems of unemployment and old age. Yet it requires no great gift of prophecy to predict that problems of health will become increasingly acute in the administration both of unemployment insurance and the old-age grants and annuities. In unemployment insurance it will be difficult to resist the pressure for cash benefits to compensate for wage loss due to illness. The one thing that most concerns the individual who cannot work is his wage loss. Whether he cannot work because of the lack of a job or because of disability is to him a minor technicality. Once cash benefits are allowed for the contingency of illness, the next step—as inevitable in unemployment insurance as it was in workmen's compensation—will be the addition of medical care in order to return the individual to a condition of "employability" as soon as possible. In considering the effects of such a sequence of steps on our national health it is well to keep in mind the fact that approximately twenty-five million workers are now in the system of unemployment insurance.

Relative to old age the problem of medical care is a more immediate one. The old-age pension is conceived as a structure that will carry the weight of

subsistence, and once built, will be a complete relief to the recipient of the pension and to society. Here is an example of failure satisfactorily to implement a broad principle through administrative practice. The incidence of illness and the need for care rise to high points during old age. From the meager data now available, the age-group "65 and over" experiences almost three times the average annual number of sick days in bed and twice the average annual costs experienced by the population as a whole.

That the health aspects of insecurity were at least partially recognized is evidenced by those sections of the act that provide grants to be expended through the United States Public Health Service and the Children's Bureau. The grants provide for the expansion of the activities of state and local public health departments, the training of personnel, and research.

In the general movement toward a more orderly system of life, the forces of public health must occupy a position of increasing importance. The assumption that this will occur is warranted by events of the more distant past as well as the immediate past.

The one thing that may be said with certainty is that public health has not suffered from the smug satisfaction that is a constant danger in all social movements. Against this danger liberal applications of critical analysis are effective. Out of such analyses, originating within the movement, redefinitions of the objectives and scope of public health have come at fairly regular intervals of about twenty years. Thus, the first concept of public health as a movement concerned only with communicable diseases was reshaped as a result of the extension of scientific knowledge. In the new form, public health expanded to embrace within its scope conditions that, while not communicable, were yet preventable. Even this boundary was soon recognized as too limited. In spite of abundant—but not especially rich—literature and debate on the subject of prevention versus cure, the evidence was plain that certain conditions required curative measures as primary steps toward the goal of prevention.

Within the past year unmistakable signs point toward a new analysis and a new definition. Health as a national resource has never been so near the center of the public stage as now. And public health workers are again asking the question that precedes a new definition: What is a public health problem?

WHAT IS A PUBLIC HEALTH PROBLEM?

Considering the panorama of public health—what is already being done and what appear to be human needs—the following criteria might be applied as an answer to this question:

1. A disease or condition that is a widespread cause of morbidity or mortality.

2. Relative to the disease or condition there is a body of scientific knowledge which, if applied, would result in its prevention, cure, or alleviation.

3. For some reason or reasons the scientific knowledge is not applied.

Any disease or condition that may be described by the above criteria is a public health problem—*i. e.*, one whose solution depends upon organized community action.

In presenting these criteria it is emphasized that no method of applying the scientific knowledge is included as a part of the definition. The only purpose is to obtain some agreement upon the nature of public health problems. Most of the controversy concerning public health has its origin in the failure of the groups most intimately concerned—public health agencies, medical, dental, nursing, and other groups—to agree upon the starting point of progress toward a given objective. Such failure to agree upon the nature of a problem can only result in progressively greater disagreement concerning the methods of solution. As proof, the present situa-

tion with respect to medical relief for millions of our population may be cited.

Medical relief may be described as a national "social blindspot." The problem has been growing vigorously for a half-century. By 1929 it was becoming evident that as the body of medical science enlarged, its distribution was impeded by an increasing expansion of the population-group which was economically unable to avail itself of the benefits. The facts concerning this group were in the process of collection when the economic debacle occurred.

Following the established custom, virtually all of the efforts to relieve the shock to millions of people were centered upon food, clothing, and shelter. There was no depression in the tradition concerning medical care for the needy sick. The professions had always done their bit and would patriotically rise to the new emergency. And even now that fable is only partially exploded. The cause? A failure to agree that the conservation of health among the relief and the near-relief population is a public health problem to be solved only by community organization and action. Yet the problem itself is one that concerns the well-being of from 10 to 30 or more percent of the total population.

Once there is a reasonable agreement upon the nature of public health problems among the groups concerned, we may expect early and appreciable increases in our national health assets. New frontiers offer their thrilling challenges and as new areas are occupied, the discoveries of science will offer newer areas.

In the immediate foreground is the need for strengthening old attacks. The task with respect to tuberculosis must be brought closer to its end. With annual deaths approximating 70,000, and with the deaths concentrated during the most productive period of life and among such population groups as young women in industry, workers in dusty trades, and the poorly fed and housed, the disease is absorbing assets that run into astronomical figures.

Our failure to act upon syphilis as a public health problem until the past year resulted in the loss of national health assets aggregating an amount that no one ever ventures to guess. In the words of Dr. Thomas Parran, "Syphilis is bad business." To those who justified inaction on the score that the public was not ready, the readiness displayed by the public must have come as a rude shock.

NEW FIELDS TO CONQUER

Applying the criteria given above, new planks are being written into the platform of public health. Cancer, neither communicable nor preventable, in the sense that smallpox is preventable, is defined as a public health problem. It is a widespread cause of morbidity or mortality; there is a body of scientific knowledge that might be applied; and for some reason or reasons it is not effectively applied. The reason may be ignorance, inertia, social or economic causes, or a combination of causes. It is significant that Congress has indicated its recognition of cancer as a public health problem by an annual grant of $700,000 for research.

Pneumonia control also offers huge dividends when it is accepted as a public health problem. The benefits of serology, the use of newer and more rapid sputum-typing methods, the emphasis on early diagnosis and medical care and on skilled bedside nursing—all these elements in their proper proportions make up the anti-pneumonia compound. Diabetes, by the very nature of the disease and its treatment, offers itself to successful attack as a public health problem. Nor is this all. Industrial hygiene is as yet a young and vigorous infant both in research and in practice. The realm occupied by the so-called chronic diseases has been explored only on its fringes.

Enough has been said to indicate the scope and direction of the movement

toward health conservation. Some, viewing the complexities of the present, may long for the old and simple days when public health problems and activities were limited to water purification and other environmental attacks on typhoid fever, routine procedures against other communicable diseases, a partial attack on maternal and infant mortality, a whole-hearted collection and a half-hearted analysis of vital statistics, and an enthusiastic preparation of annual reports. For those who suffer from this form of nostalgia it is well to remember that many of the present accomplishments in health conservation were wild and complex dreams as little as a quarter-century ago. So it is with the present. Unlike the young Alexander without new worlds to conquer, public health—a vigorous and expanded public health—begins a new march over a terrain that is known to be difficult, toward new objectives and greater accomplishments.

Presented at the banquet honoring the Silver Jubilee of the National Organization for Public Health Nursing, 36th Annual Convention, Illinois State Nurses' Association, Springfield, Illinois, October 21, 1937.

To Answer Your Questions About Records

By ANNA J. MILLER*

THE HANDBOOK on records, "Suggestions for Statistical Reporting and Cost Computation in Public Health Nursing," has evidently met a long-felt need. Over 2000 copies have been distributed. We gather from the communications that the contents are being studied carefully.

As we expected, *every* question is not answered in the handbook. Here are a few which have been submitted to the Records Committee for consideration. The decisions are also given. You may have others. Please let us have them, for others may be puzzling over the same problems.

TELEPHONE CALLS

May we interpret a telephone call to a physician or health officer as a visit in behalf of a case, although a visit is not paid to them? In our rural area it would take between forty-five minutes and an hour for our nurse to visit the physician's office. The contact is made by telephone. The call has professional content, is important, and is always noted on the patient's record.

The handbook states (page 8): "Telephone calls made to the case or in his behalf, although noted on the individual record, are never counted as visits." The Records Committee reviewed this recommendation, and decided that it should not be revised. Under no circumstances, therefore, are such calls to be included in the count of visits although they are to be reported on the record. In the particular situation cited above the suggestion is made that such telephone calls be designated instead as "telephone conferences," and that a brief statement be made in the statistical report to indicate the content of these contacts.

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*At the time this article was prepared Mrs. Miller was statistician for the National Organization for Public Health Nursing.

"NOT FOUND" VISITS

If a nurse goes to a given address, cannot find the patient, and is given another address at which she later calls without success, cannot two "not found" visits be counted? Often, when the second address is in a different part of the nurse's district, the second visit is made later in the day, with several calls intervening between it and the first visit. Sometimes, too, the second address is in another nurse's territory, or it may be even in another center altogether.

The handbook states (page 10): "Each of the visits around the neighborhood trying to find a correct address is not counted as a 'not found' visit; only one such visit is counted." This recommendation was modified as follows: An additional visit is counted if the second visit is made by another nurse, or if made by the same nurse, when considerable time has elapsed between the first visit and second visit (such as described in the question above).

"NOT TAKEN UP" VISITS

Is the case admitted when a "not taken up" visit is made?

The classification "not taken up" is not included in the visit classifications in the handbook. The classification "not taken up" visits is used by some organizations to designate visits to cases not carried for more than one visit. Although a case record may not be opened, such visits are classified by type of nursing service—similar to visits to and in behalf of cases—and the case is counted with admissions to the particular service.

"Visits to persons not taken under care" is a classification provided for in the handbook, and such visits are defined on page 8 as "visits to individuals referred for nursing service, who show no necessity for such service at the time of the visit." The number of such visits is reported as a total and these visits are not classified by type of service. The cases to which these visits are made are not admitted to the service and therefore not included in the case count.

In other words, if a visit is classified by service, the case is counted as admitted, and included in the number of admissions to a particular service. A contact which consists only of referral to another agency is not considered service rendered, and therefore individuals are not admitted to the nursing service if the contact is limited to referral for service elsewhere.

CONFERENCE ATTENDANCE AND VISITS

In the case of visits to child health conferences, when the mother sees the doctor or the nurse or both, and where definite instructions concerning the care of the child are given, with entries on each case record, should the visits be counted as office visits?

The handbook states (page 8): "Attendance by cases at a nursing conference should be included in the count of office visits only if individual service is rendered as shown by an entry on a case record or special report form. (Otherwise, such visits should be included only in the item provided, 'attendance at nursing conferences.')" According to page 11 of the handbook, "If seen by both physician and nurse, the visit is counted only as a visit to a medical conference."

The instructions on page 11, relative to medical conferences, have been revised. The same procedure applies to the medical conference as to the nursing conference as given above. To illustrate this specifically, the notes of several actual individual conferences of the parent with a nurse following a medical child welfare conference—which were counted as office visits—are given here. (These visits were made either in a separate room or in a corner of a room screened off from the main room so that the nurse and patient were comfortably

seated with adequate privacy. The length of time involved for each visit is indicated.)

No. 1. Baby 10 months old (under care of private pediatrician, who last saw child at 9 months).

Baby weighed. Child has idiosyncrasies to orange juice and milk. Mother wanted to know if she should give baby chocolate pudding and meats, and whether he should be weaned. Mrs. C. was comparing her baby with neighbors' infants who did not have food problems and had gained normally. Explained why she should not feed her child as neighbor does, and also that she had a different problem because of slow physical development of child and past history of eczema. Advised not to add any foods to diet, and against weaning to cup until she could talk over problem with the doctor. (20 min.)

No. 2. Baby 3½ months old.

Baby weighed. Formula routine checked. Advised to continue wearing round band, since umbilicus protrudes. Has discontinued 2 a.m. feedings on advice of doctor and has had no difficulty in adjusting schedule. Reviewed training for bowel control. Mother making slow progress but persevering. (15 min.)

No. 3. Preschool child 15 months old.

Child has refused to eat cereal. After encouraging the mother to go over in detail her schedule of feeding, it developed that she had tried different kinds of cereals and failed to get the child to eat them. With this information as a background, nurse advised mother to forget about cereals for a week and give other foods in diet, and after a week to try the cereals again. Throughout visit emphasized need for mother to be objective about food habits, and also the great need for patience in establishing proper food habits. Discussed vaccination briefly. (20 min.)

No. 4. Baby 8 months old. Mother came after doctor left station.

Family planning to move to farm. Urged thorough physical examination (none made since 6 mos.) and vaccination. Went over general health habits and food habits with mother, and gave supply of printed material. Mother has fairly good grasp of training child. Invited to come to station for visit if she came back to town at any time. (15 min.)

No. 5. Baby 11½ months old. Weight 12.2. (Premature birth—3½ pounds.)

Mother having difficulty getting baby to take egg yolks. Suggested giving with vegetables. Stressed importance of egg because of high iron content. Suggested substitution of tomato juice for orange juice, which baby refuses. Advised to return to doctor's office for antiluetic treatment. Urged outdoors daily. (15 min.)

READMISSIONS

Are there to be no "readmitted" cases even when the patient is chronically ill and has recurring attacks several times in the year?

The daily report form does not provide for a count of readmitted cases. The only classifications of cases are "new" and "discharged." Therefore, from the entries on the daily report it is possible to tabulate only admissions and discharges within the month and within the year. The Records Committee does not consider additional details on each count essential. It is not possible to keep a balance sheet from this form showing the number of cases brought forward at the end of each month. A count of records, made by the nurses at the end of each month, has been used widely in the past for the case count. Several agencies have discontinued doing this, and are limiting the detail to cases admitted and discharged in each service.

However, the daily report form, N.O.P.H.N. 64, can be adapted so that a count of readmissions will be available (cases which have been admitted for a given service within the year, have been discharged, and have come back for the same service within the year—such as a tuberculosis case who is discharged on admission to a hospital and returns for nursing service within the same year). Several devices may be used for recording readmissions:

1. Enter N_1 for the first visit and N_2 for the first visit after discharge.

2. Use a check mark to indicate other than first visits instead of R, and use R to indicate a readmission.

3. Indicate Re in the column used to record discharges.

Can Allergy Be Prevented?

By ROBERT CHOBOT, M.D.
New York, New York

What can be done for the prevention and control of allergy, a condition from which ten out of every one hundred people in the United States suffer?

THE TERM ALLERGY has been appearing in current literature more and more frequently in the last years. What does the term mean and what is its significance?

The term *allergy* is used today to characterize the hypersensitive conditions of man. We say that people are allergic when their response to certain ordinary substances which do not in any way affect the normal person is definitely abnormal. Nearly everyone has seen individuals who become ill when they eat eggs or chocolate, or who develop a rash after eating strawberries or other fruits. During the summer months the hay fever patient suffering with inflamed eyes and nose, many sneezes, and even attacks of asthma comes to the attention of everyone. These patients are hypersensitive and are called allergic. The term describes a bodily condition rather than a disease entity.

Allergy is due to a weakness transmitted to the individual by his heritage. We know from observation of patients that in a family where both parents suffer from an allergy, the offspring are very apt to show manifestations of this weakness. We can in no way influence this transmission, once it is established. It does not mean, however, that a specific allergy is transmitted. In other words an asthmatic parent need not necessarily have a child with asthma, but he may have a child who is affected with hay fever, eczema, or hives.

We have no evidence to show that allergy is on the increase in this country, but many more cases are recognized as such, since the diagnosis is made more frequently and earlier today than formerly. The problem of allergy is receiving more attention from the public than heretofore and with it comes the consideration of the facts of prevention.

THE PREVENTION OF ALLERGY

What can be done along the lines of prevention? The actual prevention of allergy would entail the control of marriage of people who are allergic. For medical experience shows that in fifty percent of the patients having allergy there is a positive family history of hay fever, asthma, eczema, or hives.* It is obvious that we can not prevent marriage between allergic people and so completely prevent the inheritance of allergic conditions.

We know that although the biological weakness may be present in an allergic patient, medical symptoms of the particular allergy do not appear until actual contact with the specific irritant acts as a trigger mechanism. This means that we must try to seek out people who have allergic family histories but no clinical evidences of allergy, and establish their potential allergies before medical symptoms appear. This is not impossible to

*See "Human Sensitization," by R. A. Cooke and A. Vander Veer, *Journal of Immunology*, Vol. I, 1916, pp. 201-205, a study whose results have been verified by subsequent research.

Common ragweed as it is seen before it flowers and releases its pollen

Courtesy Mrs. Wesley C. Ahlgren

do because of the hereditary factor in allergy. People from known allergic families should be submitted to diagnostic tests which may reveal any potential allergy. In a great many cases the allergy may be prevented or the severity limited. For example, if a child as yet free from clinical symptoms of allergy is skin tested and found to be sensitive to dog dander, it is certainly advisable to keep that child away from the dog. This is a procedure which can be carried out with other inhaled substances and with foods suspected of causing trouble.

EARLY DISCOVERY AND TREATMENT

We know that approximately ten out of every one hundred people are allergic, and that from twenty to forty percent of asthmatic children have their first attacks of asthma in the first three years of their lives. Therefore, the first step is to consider infants who have a family history of allergy and who have frequent head colds or any other manifestations of allergy as potential sufferers until definitely proven otherwise. It is true that a great many children will be observed and tested unnecessarily as a result of this attitude. But—a fact which is more important—a great many children will have their allergy recognized before any harmful effect has been established. In other words the child of an allergic family has nothing to lose but everything to gain by this measure. We likewise know that many people become sensitive to the bacteria they carry about in their sinuses, teeth, and tonsils. It is imperative in any consideration of prevention of allergy that care be taken to remove all foci of infection which if left untreated will eventually cause a great deal of trouble.

Colds and bronchitis cause so much trouble, if the child is allergic, that everything possible to keep these at a minimum should be attempted. Generally the first asthmatic attacks follow bronchitis or a cold or any of the childhood diseases such as whooping cough or measles. Children having frequent head colds should have their sinuses examined, and their tonsils and adenoids should be removed if these appear to be the source of trouble. To wait and hope that the patient will outgrow or lose his allergy is the worst possible thing that can be done, and it is unfortunate that such advice is still given even though all our medical experience is to the contrary. These allergic patients, if left untreated, have a tendency to get progressively worse. The stuffy noses seen so frequently in these children should be investigated, for often they are caused by animal pets or house dust or other irritants, which when not removed from

the environment result in the appearance of symptoms of asthma or whatever other allergy they may have.

Bacteria of all kinds are present constantly in the nose of a normal person, but do not give rise to infection because the mucous membranes lining the nose are in good condition and tone. However, the stuffy noses so commonly seen in allergic individuals furnish excellent focal points for infections from such bacteria, and this results in colds and eventually in sinus trouble and asthma. Persistent observation may prevent the infection from becoming a medical problem in this way. It can not be stressed enough that frequent examinations of all children in an allergic family, even if they are as yet without symptoms, should be carried out periodically.

In the young child, up to the age of three or four, foods play a major role as the cause of allergic symptoms, particularly in those children suffering from eczema or hives. Those food sensitivities should be investigated and the offending foods removed from the diet. As the child grows older, he is likely to lose these food sensitivities and become sensitive to the inhalants, particularly the pollens, and then he has hay fever or asthma. Even if the child does not outgrow the food sensitivity he may still develop inhalant allergies in addition to any other allergy he might have. What can be done in prevention for these sufferers?

POLLENS THAT CAUSE HAY FEVER

To prevent the condition we must first understand our problem. Hay fever is caused by the pollens of grasses and weeds which pollinate every year at certain definite periods of the spring and summer. These pollen grains are microscopic, fine, powdery, yellow particles which are blown about by the millions, so that they fill the eyes, nose, and mouth of everyone who breathes them in. Normal people are unaffected by the pollen grains, but the allergic person, specifically sensitive to the individual type of pollen, is promptly affected and has hay fever. There are two main types of pollen: (1) the heavy, sticky, insect-borne type that is found

Common ragweed during the pollinating stage in August and September

in plants with colorful flowers and attractive odors (2) the light, powdery, air-borne type that is found in the less colorful and odorous flowers and is blown about by the wind.

It is this latter type that is important to the sufferers of hay fever. The air-borne pollens are carried by the wind for hundreds of miles and remain suspended in the air until a heavy rain washes them down. Pollen grains have been found at great heights in the air and also miles out at sea. The fact that they are blown for miles means that local extermination of the grasses and weeds, while a help, is only a very moderate one. The amount of pollen produced by some of these plants is quite extraordinary. A single well developed ragweed plant has been found to produce eight billion pollen grains in five hours, and a field of grass has been estimated to have produced, during the active stage of pollination, eight million pollen grains a square foot of surface. It has been calculated that an average city lot of ragweed can produce at the rate of sixty pounds of pollen an acre.

In contrast to these wind-pollinated plants, those that are insect-pollinated produce comparatively little pollen.

PERIOD OF POLLINATION

The weeds and grasses have a definite period each year during which they pollinate, and there is surprisingly little variation in this period. There are roughly three periods of pollination. In the spring the trees pollinate from April 15 to June 15. The most common of the trees whose pollens cause trouble are ash, birch, beech, hickory, oak, poplar, and elm. The summer type of hay fever is caused by grasses such as timothy, orchard, rye, blue grass, sweet vernal, and plantain. They pollinate next and the period of pollination extends from May 15 to July 15. The fall type is due chiefly to ragweed, which pollinates from August 15 till the first frost. Fall hay fever is caused largely by ragweed, which is without doubt the most important of the pollens from the standpoint of allergy causation. Goldenrod and roses actually cause little hay fever despite much that has been said or written about them.

GEOGRAPHIC DISTRIBUTION

The geographic distribution of the chief allergy-producing pollens is as follows: Oak is found in every state; birch, chiefly in the eastern half of the United States. Poplar is fairly well distributed throughout the United States, but is most commonly found in the southwestern states. Hickory is pretty well confined to the eastern third of the United States. These are the most important of the tree pollens.

The grasses are distributed generally throughout the United States. The most important of the grasses is timothy, and it is found pretty nearly all over the country. June grass, another important grass, is found in the northeastern states down as far as Virginia and as far west as Kansas. Bermuda grass is one of the most important pasture grasses in the southern states, and is found as far north as Maryland. Ragweed is of great importance throughout the United States, with the exception of the far-western areas where it is of secondary importance. Sagebrush is a very important cause of late hay fever in the western states.

The technique of weed destruction is important. It will not suffice to merely mow down the weeds and allow them to remain *in situ;* for a great many of them may have been pollinating at the time they were cut, and the pollen grains may still cause trouble if left alone. It is therefore essential to cut grasses and weeds regularly before they attain any sizable growth, and if at all practical, it is wise to burn them after cutting. All communities should cut down weeds and grass in their lots and neglected areas regularly, because while this procedure can not completely eradicate the

cause, it does tend to lessen it. This measure can best be accomplished by municipal ordinances which should be enforced.

However, isolated local attempts can not entirely handle the problem. The concerted effort of all interested agencies and groups is necessary in order to achieve results. A coördinated program is needed, in which local community health, social, and civic organizations throughout a state work together under the leadership of the state health department with the coöperation of state agricultural colleges and non-official civic groups such as garden societies and women's clubs. Ragweed control, in particular, requires a broad program of control which is statewide—and indeed nationwide—in scope.

Pollen counts are carried out by the weather bureau and by hospitals and clinics throughout the country which are interested in the problem of allergy. These counts give us a very definite graph showing the concentration of various pollens in the air at a given time. The identification of individual pollens is possible because under the microscope they have very definite and characteristic formations. Pollen counts are used at present to correlate the patients' symptoms with the amount of pollen in the air more than for any other purpose. These counts, however, are our most accurate method of determining just what pollens are flying and causing symptoms at the moment.

Preventive medicine unfortunately has at the present time little to offer the hay fever sufferer, but fortunately medical treatment has. Immunizing injections of the offending pollen grains well in advance of the onset of symptoms will give relief to the vast majority of patients. There are, however, a few things hay fever sufferers should not do. They should avoid rides through the country during the hay fever season and also should avoid dusty places. Draughts of air should be avoided because of increasing the patient's contact with pollen in the air.

Although a comparatively new field of medicine, allergy has a well developed body of knowledge at its command. While there are definite limitations to what we can do for the allergic patient along preventive lines, a great deal can be accomplished along therapeutic lines.

ADDITIONAL SUMMER COURSES*

Iowa

Ames. Iowa State College. June 14-July 21. Courses in Application of Educational Methods to Classes in Home Hygiene and Care of Sick, Nutrition, Sociology, and Psychology.

For further information write to Fern A. Goulding, Assistant Professor of Hygiene.

Missouri

St. Louis. St. Louis University. June 20-July 30. Courses in Principles, Organization, and Administration of Public Health Nursing, Nutrition, Psychology, Sociology, Social Case Work, and Field Work in Public Health Nursing.

For further information write to A. Louise Kinney, Instructor in Public Health Nursing.

National Society for the Prevention of Blindness sponsors sight-saving courses for the training of teachers and supervisors of sight-saving classes at:

Tulane University, New Orleans, Louisiana	June 13-July 23
Wayne University, Detroit, Michigan	June 27-August 5
State Teachers College, Buffalo, New York	July 5-August 12
Teachers College, Columbia University, New York, New York	July 6-August 13
University of Cincinnati, Cincinnati, Ohio	June 20-July 26
University of Washington, Seattle, Washington	June 20-July 20
University of Hawaii, Honolulu, Territory of Hawaii	June 27-August 5

For further information write to the respective colleges or universities at which the courses are given.

*These courses are not a part of curricula which have been evaluated by the National Organization for Public Health Nursing. A list of summer sessions appeared in the April number.

Occupational Disease Compensation

By HERBERT HIGBURG
Branch Manager, Employers Mutuals, Indianapolis, Indiana

Industrial compensation laws, which started by providing benefits to injured workmen, are being extended to include recognized occupational diseases

WORKMEN'S compensation insurance is generally considered progressive social legislation. It is therefore surprising to most people to know that the beginning of these laws is traced to a European monarchy and the author was Prince Von Bismarck, who in the train of social unrest following the Franco-Prussian war, introduced it for the German industrial worker in 1884—some historians say for reasons of political expediency, a sop to a discontented populace.[1, 2] In 1897 we find this legislation in Great Britain, known as the Workmen's Compensation Act of 1897; and in 1904, even under the regime of oppressive Czaristic government in Russia, provision for compensation for injured workmen was the law of the land.

Not until 1910 was compensation introduced into this country, when New York passed the first law; and ten states enacted compensation legislation in 1911.[3] These laws of course applied only to traumatic accidents in industry. The New York law was declared unconstitutional, but after a constitutional amendment a new law was passed and became effective in 1914.[3] Today 46 of the 48 states provide for benefits to injured workmen,[4] the only exceptions being Mississippi and Arkansas. In late years these laws have been generally extended to include recognized diseases which are inherent in many industrial and manufacturing processes.

There are two general plans used by various states in providing these benefits: the so-called "schedule," which is an enumeration of such occupational diseases as the law contemplates should be compensated, and the so-called "all-inclusive plan," which may extend benefits to many diseases and conditions not contemplated under the "scheduled" plan. Most states have provided coverage for occupational diseases by an extension of their existing traumatic laws. A very few within the last two or three years have enacted separate compensation legislation affecting occupational disease hazards distinctly apart from the traumatic acts. Among these are the states of Illinois and Indiana, whose occupational disease laws are substantially alike, the Illinois law having become effective in 1936 and the Indiana law in 1937.

Outstanding among the states having scheduled occupational-disease laws are New York, Minnesota, and Ohio. The scheduled laws generally name from twenty to thirty occupational diseases which are inherent in common manufacturing processes. The United States Department of Labor lists sixty-three principal industrial diseases found in this country. The ones most commonly known to the public are silicosis, found in the stone and foundry industries; lead poisoning; conditions resulting from exposure to chemicals and acids of many kinds; and dermatitis, of which there are many varieties. Even such conditions as writers' cramp and frostbite are included in some jurisdictions.

The old Indiana traumatic law pro-

vided that compensation should not include disease except as the result of injury. Labor leaders and social reformers have long agitated for benefits to workmen contracting diseases in industry, and occupational-disease legislation is becoming rapidly extended throughout the country. In addition to Indiana, the states of Delaware, Illinois, Michigan, Ohio, Pennsylvania, Nebraska, Washington, and Wisconsin adopted these laws or amendments of existing laws during their 1937 legislative sessions. This makes 21 states and the District of Columbia which compensate for occupational diseases.[4]

An examination of the provisions of the Indiana law will give some idea as to how this type of legislation protects the disabled employee. The Indiana law provides that the act shall be elective, and election is accomplished by the employer filing a written acceptance of the act with the industrial board.[5] If he does not file a written acceptance, or election, to be subject to this law, he remains subject to common law action by the complaining employee with the common law defenses: (1) assumption of risk (2) negligence of fellow-servant (3) contributory negligence, removed. The only common law limitation of liability is in the event of death, where the statutory limit of $10,000 applies.

An employer having elected to operate within the provisions of the law has, for a period of four years from 1937, the option of recalling his acceptance by filing notice with the industrial board sixty days prior to October 1 of any of these years. He may again elect to come under the law, but upon second acceptance he is permanently bound by its provisions. The occupations specifically excluded from the application of the law are: (1) casual laborers (2) farm or agricultural employees (3) domestic servants (4) employees in railroad train service. The definitions of what shall constitute an occupational disease seem ambiguous and difficult of interpretation. As has been true in Illinois, there will probably be in Indiana a considerable number of appeals to the high courts for interpretation of occupational diseases and application of this law.

Briefly, the principal benefits provided for are as follows: in the case of death, 55% of the average weekly wage, for a maximum period of 300 weeks, plus $100 burial expense; for temporary total disability, 55% of the weekly wage, for a maximum period of 500 weeks; for temporary partial disablement, 55% of the difference between the average weekly wage before and after disablement, not to exceed 300 weeks. There is in this law, as in the traumatic act, a waiting period of seven days before payments begin after disability. Disablement in order to be compensable must occur within one year of the last day of last exposure to the hazards of the disease, except in cases of silicosis or asbestosis, when the limit is extended to three years. In the case of death, it is compensable only if it occurs within one year after date of disablement—except where there is a pending claim—and in no event, more than 300 weeks after disablement. The law gives a schedule of benefits for specific disablements, for amputations, loss of use of member, and total or partial total permanent disabilities. Provision is made for disfigurement in the discretion of the industrial board, but with benefits not exceeding 200 weeks. As in the traumatic act the maximum weekly compensation is $16.50; minimum $8.80.

Limitation of filing of claim is two years after the last day of the last exposure and within one year from date of disability in case of disablement; in the case of death, action must be commenced within one year after death and within three years after the last day of the last exposure. The law provides that there shall be a presumption of conclusive liability, regardless of length of exposure, upon the last employer, ex-

cept again in the cases of silicosis and asbestosis, when the employer liable is the one in whose employment the employee was last exposed during a period of sixty days or more. The rules of administration and provisions for insurance and procedure follow closely, if not exactly, those applying to the old traumatic law.

The part of the nurse in the industrial program is obvious. The early recognition of symptoms indicating disease is important. A thorough understanding of these diseases, with an intelligent program of prevention is more important. Occupational diseases are preventable and as susceptible to control as are accidents—perhaps even more so. A healthful environment, safe industrial processes, and the education of employees to the importance of safety are main features of control. In many cases the substitution of materials is practical as a means of preventing hazards. All of this is a fertile field in the conservation of health and life—a worth-while investment in elimination of human wastage in industry.

REFERENCES

[1]Bismarck, Prince Otto von. Encyclopaedia Britannica, Vol. 3, p.667.

[2]Workmen's Compensation. Encyclopaedia Britannica, Vol. 23, p.744.

[3]Workmen's Compensation Legislation of United States and Canada. Bureau of Labor Statistics, U. S. Department of Labor, Washington, D. C., 1929.

[4]Labor Law Information Service. Occupational-Disease Legislation in the United States, 1936, with appendix for 1937. Bulletin No. 652, Bureau of Labor Statistics, U. S Department of Labor.

[5]Ibid., pp. 62-78, Indiana Acts of 1937, Chapter 69. The information regarding Indiana legislation in the article may be found in this source.

Condensed from paper presented before the meeting of the Indiana State Nurses' Association, Terre Haute, Indiana, October 11, 1937.

How Would You Answer This?

For many months this column has served as a forum in which questions and problems on maternal welfare raised by nurses in the field, have been asked in one issue and answered the following month. This month the Maternity Center Association, 1 East 57 Street, New York, N. Y., asks a question and answers it.

QUESTION: Have you ever thought of having classes for expectant fathers?
ANSWER: Yes. This is our story:

On February 28, 1938, the following announcement was sent to all New York City newspapers:

On Thursday, March 10, at 8 p.m., the Maternity Center Association will begin its first series of classes for fathers. For the past few years, fathers have been coming with their wives, but this series is to be strictly a stag affair. The course consists of simple lessons on how to help your wife keep fit during pregnancy; how to take care of the baby—with practice lessons in diapering, bubbling, bathing, and feeding, using *Junior*, the rubber doll; how to make attractive nursery furniture on a burdened budget. The classes are free and there is only one prerequisite: you must be a prospective father!

Within two days one hundred expectant fathers had telephoned, written, or called in person to get their tickets. We had room for only fifty, so the class was divided into two sections. The first section has just been completed and the fathers voted it a highly educational and helpful experience and have planned a reunion at the Maternity Center Association a year from now when they will all come with their babies. They also

requested that the same classes be given to their wives, so afternoon classes have been planned and the sessions will be repeated for the wives of the expectant fathers.

There were two lectures, one demonstration, and an individual practice period for each father, in this series. The first lecture was a completely stag affair where the physiology of pregnancy and labor was discussed by an obstetrician, who illustrated how a baby was born, using a metal pelvis and baby.

The second lecture was given by a nurse, who discussed the many ways in which a husband can help his wife during pregnancy; the importance of his knowing what makes up safe maternity care; and the necessity for him to be familiar with the symptoms that indicate the need for medical attention.

The third class was a demonstration on undressing, bathing, and dressing the baby, and how to fit the baby into the family's daily schedule without confusion.

Then followed the most enjoyable hours in the series—the practice periods—when the expectant fathers in shirt-sleeves and butcher aprons undressed and bathed and dressed *Junior*. These hours were a great deal of fun, not only for the fathers but for the nurses. The men crooned or fell into verse as they did their work, with such light touches as, "I went to school to read and write but I came here to pin and dipe." One when asked why he took the course said, "I didn't want my mother-in-law to be able to tell me anything I didn't know about the baby."

Not the least exciting moment was the presentation of a diploma which stated: "This certifies that John Doe has attended a series of classes for expectant fathers at the Maternity Center Association." The diplomas were homemade, but no parchment was ever more appreciated.

International News Photos

"We came here to bathe and dipe"

Preparation for Orthopedic Nursing

By RUTH A. HEINTZELMAN, R.N.
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U. S. Department of Labor, Washington, D. C.

What should be the preparation of the nurse who participates in orthopedic nursing services and what facilities are available for giving such preparation?

THE TYPE of preparation that will best equip the nurse to function effectively in field services in orthopedic nursing has received intensive study in the past year. Although a continuous review of the nursing services now being given in programs for the care of crippled children under the Social Security Act will be necessary as a guide to further plans for preparation of nurses, some progress has already been made in clarifying ideas as to the type of preparation necessary.

This article presents the recommendations which were approved by the Education Committee of the National Organization for Public Health Nursing for the preparation of nurses participating in orthopedic programs; describes in chronological order the events that resulted in the formulation of these recommendations; and discusses the facilities now available for preparing public health nurses to meet the qualifications which have been recommended. Qualifications recommended by a national professional organization will undoubtedly be of much value as a guide to persons charged with planning and carrying out field nursing services for crippled children.

QUALIFICATIONS FOR NURSES

The following recommendations were approved for nurses participating in orthopedic programs, at the meeting of the Education Committee of the National Organization for Public Health Nursing on October 9, 1937:

1. Every nurse engaged in the crippled children's program should:
   a. Have the minimum basic preparation set forth in the new curriculum guide for schools of nursing.
   b. Be a well qualified public health nurse, meeting the minimum requirements of the National Organization for Public Health Nursing.
2. Nurses engaged in a supervisory or consultant capacity should have special training, which at the present time is available only in approved physical-therapy courses. (See note on approved courses, page 307).
3. The approved public health nursing courses should put more emphasis on orthopedic service in their general programs and encourage, in centers where there are adequate facilities in the university and community agencies, the development of opportunities for basic preparation.

The various steps through which the groups concerned with orthopedic nursing, particularly in relation to crippled children, studied the needs and problems of the field and the way in which these recommendations for qualifications of nurses were finally developed are of interest.

A review of the first plan for services to crippled children under the Social Security Act submitted to the Children's Bureau in 1936 by 18 states indicated that:

> At least 12 of the 18 state plans specifically referred to the fact that public health nurses would participate in the programs of aftercare.

Eight of the 18 state plans showed that "orthopedic nurses," "field nurses," or "physical-therapy nurses" would assist in the program of services for crippled children.

In only two of the 18 state plans was there any statement regarding qualifications of the nurses selected to participate in the programs. One state plan outlined qualifications for "orthopedic nurses," and another stated that public health nurses employed in crippled children's services would be certified by the nursing division of the state board of health.

In one state plan, reference was made to arrangements for special preparation in physical therapy for the nurses.

This would seem to indicate that although fairly large numbers of public health nurses were expected to participate in the state programs, there were no clear ideas as to the kind of preparation necessary to enable the nurses to function effectively.

Before the development of state programs under the Social Security Act, field nursing service was given to crippled children most often through visiting nurse associations, many of which had well organized field staffs of nurses trained in public health nursing, some of them trained and experienced also in orthopedics. Many nurses from the visiting nurse associations were carrying out the functions of orthopedic nursing, as these are outlined in the statement of functions by the N.O.P.H.N.* However, when such treatment as physical-therapy procedures were indicated, they were given by nurses with special preparation. One state developed its own facilities for training public health nurses to give specialized services in the state program.

COMMITTEES CONSIDER THE PROBLEM

Special advisory committees on services for crippled children considered at various times, beginning with a meeting on December 17, 1935, the need of facilities for training nurses as well as other professional workers for crippled children's programs. At a meeting of the committee of state and territorial health officers on standards and administrative details for state programs of services for crippled children, in April 1936, it was recommended that the establishment of standards for the qualifications of nurses as well as of other professional workers should be based upon the requirements of nationally recognized organizations in the different professional fields.* In the fall of 1936, at the meeting of the Advisory Committee (to the Children's Bureau) on Services for Crippled Children, it was recommended that the Education Committee of the N.O.P.H.N. be requested to submit recommendations concerning the qualifications of nurses in the field programs for crippled children.**

As the programs for the care of crippled children developed, numerous requests came to the Children's Bureau from the states for suggestions regarding qualifications of nurses. In 1936, in order to assist the states in the initiation of their plans for nursing services, the public health nursing consultants of the Children's Bureau outlined some qualifications desirable for nurses in the programs, based on the principle that public health nursing preparation should be fundamental for all nurses functioning in field services for crippled children.

Considering that it was the function of a professional nursing organization to define qualifications for the orthopedic preparation of nurses working in these programs, the director of the Public Health Nursing Unit of the Children's Bureau conferred in the spring of 1936 with the executive secretary of the National League of Nursing Education re-

*National Organization for Public Health Nursing.

*Recommendations of committee of state and territorial health officers on standards and administrative details for state programs of services for crippled children, April 16, 1936. (Mimeographed.)

**Recommendations of the Advisory Committee (to the Children's Bureau) on Services for Crippled Children made at its meeting of October 9-10, 1936. (Mimeographed.)

garding schools of nursing that offered courses of graduate study in orthopedic nursing. She was given a mimeographed outline of courses which included orthopedic nursing, available to graduate nurses, and was referred to the Curriculum Committee for current information regarding the programs of study in the basic nursing courses being formulated by the production committees working on the new curriculum guide for schools of nursing.*

The secretary of the Curriculum Committee explained the plan outlined for the new curriculum. The program of study in orthopedic nursing was included in the section on medical and surgical nursing and was entitled, "Nursing in Conditions of the Musculo-Skeletal System." The new unit provided for study of the social and economic—as well as the preventive—aspects of conditions requiring orthopedic care, both important in programs of field services for crippled children. It seemed appropriate, therefore, that in any plans for preparation of public health nurses for services in crippled children's programs, the type of study outlined in the new curriculum guide should be considered basic.

PREPARATION IN VARIOUS STATES

The Public Health Nursing Unit of the Children's Bureau sent letters to state departments or boards of nurse examiners of the 48 states requesting current information concerning orthopedic nursing programs offered to undergraduate students, including affiliating students, and to graduate students in schools of nursing. Replies were received from 39 states. In one of the states no program of study in orthopedic nursing was offered in any hospital of the state. The replies of 38 states yielded the following information.

Provisions for orthopedic nursing as undergraduate nursing experience were indicated in:

7 states as a part of the course in pediatrics only
6 states as a part of the course in general surgery
2 states as a special or distinct course in orthopedics
9 states as a part of the course in pediatrics, general surgery, or orthopedics
14 states in which the course or method was not specified

Provisions for orthopedic nursing as graduate nursing experience or experience obtained by affiliation in the undergraduate course were indicated in :

8 states, which specified both graduate and affiliate orthopedic-nursing courses
7 states, which specified affiliate courses but not graduate courses in orthopedic nursing
21 states, which stated that no graduate or affiliate orthopedic-nursing courses were offered
2 states, which made no statement about graduate or affiliate orthopedic-nursing courses

Only 4 states of the 38 made any comment as to the quality of orthopedic-nursing experience in schools of nursing. Little information was obtained from the states regarding details and quality of orthopedic-nursing instruction and experience offered in either the undergraduate or graduate courses in orthopedic nursing. However, the requests from state agencies to the Children's Bureau for information and advice regarding facilities for graduate education of nurses for services in the state programs was evidence that few nurses with adequate preparation were available in most of the states.

CONSIDERATION OF PROBLEM

At a meeting of the Education Committee of the N.O.P.H.N. on November 17, 1936, the director of the Public Health Nursing Unit of the Children's Bureau presented the problem caused by the dearth of nurses qualified for field services in programs for crippled chil-

*National League of Nursing Education. A Curriculum Guide for Schools of Nursing. Unit XI, page 426. 50 West 50 Street, New York, N. Y., 1937.

dren and the concomitant lack of facilities for preparation of nurses for such service. The committee was particularly interested in the problem because the staff of the N.O.P.H.N. had already received frequent requests for information regarding public health nursing activities in crippled children's programs. Therefore, a few months later a meeting of a temporary committee to discuss functions and preparation of public health nurses for field service in orthopedic nursing was called by the N.O.P.H.N. At this meeting it was decided to enlarge the committee to include representation from the orthopedic surgeons and physical therapists.

FORMATION OF ORTHOPEDIC COUNCIL

It was decided at a meeting in the N.O.P.H.N. office on March 4, 1937—which was attended by all members of the temporary committee—to obtain more information regarding the content of orthopedic courses now offered to nurses and to form an orthopedic council to study the preparation of nurses in this field. Among the tentative decisions reached at the meeting was an agreement that nurses in the public health field should be prepared to carry out any of the functions of orthopedic service, as they are outlined by the N.O.P.H.N.; therefore they must be qualified public health nurses, meeting minimum qualifications for nurses appointed to positions in public health nursing, as well as having instruction and clinical experience in orthopedic nursing. At this meeting it was decided that the orthopedic council would include membership as follows: an orthopedic surgeon; a physical therapist; an instructor with experience in and a knowledge of instruction in orthopedic nursing as given in schools of nursing; and representatives from the N.O.P.H.N., the Public Health Nursing Unit of the Children's Bureau, the state departments responsible for the administration of crippled children's programs, and public health nursing associations that give services for crippled children.

COURSE DIRECTORS

The preparation of nurses and the manner in which they were participating in programs of services for crippled children had the attention of another professional nursing group, namely, the Council of Course Directors, which comprises the directors of the public health nursing courses approved by the N.O.P.H.N. The course directors attended a conference on public health nursing education called by the United States Public Health Service in Washington on April 1, 1937, at which the public health nursing consultants of the Public Health Service and the Children's Bureau were present. Included on the agenda was a topic on the preparation of nurses for special fields, including orthopedics. One important recommendation of the group at this meeting was that preparation for all special fields should be based upon general preparation in public health nursing. For county public health nurses participating in programs for the care of crippled children, it was recommended that the minimum preparation should include orthopedic nursing as outlined in the new curriculum guide for schools of nursing. It was decided that supervisors of orthopedic nursing should have, in addition to the above-mentioned training, preparation in supervision in accordance with the recommendations of the N.O.P.H.N. and a special course in physical therapy.*

At the meeting on June 5, 1937, of the Council on Orthopedic Nursing created under the auspices of the N.O.P.H.N., several points agreed upon as fundamental coincided with the recommendations of the Council of Course Directors, on such basic matters as ac-

*Conference on Public Health Nursing Education, held at U. S. Public Health Service, Washington, D. C., April 1, 1937. (Mimeographed.)

ceptance of the course of study in orthopedic nursing outlined in the new curriculum guide and preparation in accordance with the minimum qualifications of the N.O.P.H.N. for nurses serving in crippled children's programs. It was decided that if the undergraduate education of the nurse had not included a course of study in orthopedic nursing as outlined in the new curriculum guide, this should be given as a graduate course.

The need of orthopedic-nursing supervisors or consultants for a course in physical therapy was discussed. A subcommittee of the Council on Orthopedic Nursing was finally appointed to outline a course of study for consultant or supervisory nurses employed in programs of services to crippled children, and to submit a report to the Council for final decision.

When the subcommittee met to consider the details of preparation for public health nurses who function as special consultants in programs for crippled children, the members agreed in the main to the recommendations of the Council on Orthopedic Nursing. It recommended, however, that public health nurses who function as special consultants should have completed a physical-therapy course approved by the Council on Medical Education and Hospitals of the American Medical Association. The committee's opinion was that it will be many years before nursing schools will provide preparation for orthopedic nursing of the type recommended in the new curriculum for all undergraduate students, and therefore universities should be encouraged to develop graduate courses to supply the need for such basic preparation. The subcommittee agreed that universities should be encouraged to develop courses in orthopedic nursing which would include advanced courses for those who have had basic preparation, and basic courses for the public health nursing supervisors who have not had good fundamental preparation.

After several meetings of the subcommittee, the Council on Orthopedic Nursing submitted to the Council of Course Directors recommendations for preparation of public health nurses for participation in crippled children's programs. The Council of Course Directors considered the recommendations and submitted them with its own final recommendations to the Education Committee of the N.O.P.H.N.

EXISTING FACILITIES

The task remains to evaluate the facilities we now have for preparing public health nurses to meet the qualifications recommended by the Education Committee of the N.O.P.H.N. and to encourage development of facilities for preparation so that public health nurses may participate more effectively in programs for the care of crippled children.

Prior to the fall of 1936 few requests were received by the Children's Bureau for advice regarding the preparation of orthopedic nurses, but as programs of services for crippled children have expanded, the need for qualified nursing personnel has become more apparent to administrators of state programs. In the period between March and December 1937, about half the state agencies administering crippled children's programs under the Social Security Act requested advice from the Children's Bureau regarding the type of preparation necessary and facilities available for the preparation of nurses to participate in the programs. In addition to requests from official agencies there have been numerous inquiries of a similar type from individual nurses.

In December 1937, at a meeting of the public health nursing advisory committee to the Children's Bureau, the preparation of nurses for field service in orthopedic nursing was considered. One of the recommendations of this committee was that educational institutions equipped to provide or arrange for clinical experience in orthopedic nursing

should be asked to make educational opportunities available in this field. Efforts in this direction have already been made.

During the past year plans have been developed to make preparation available, through three approved public health nursing courses, to nurses who are to function in state programs for the care of crippled children. In the spring of 1937 a course was given in Boston, Massachusetts, in which Simmons College, the Children's Hospital, Harvard Medical School, and the Boston Community Health Association participated. The course is to be given again this spring. Courses have also been planned in New York City at Teachers College, Columbia University, and in Cleveland, Ohio, under the auspices of Western Reserve University—both scheduled to begin during the late winter or spring of 1938.

It is hoped that other courses will be developed in different parts of the country in order to meet the need for qualified nursing personnel for field services in crippled children's programs. Now that some agreement has been reached with regard to qualifications for nurses in the programs and a beginning has been made in planning for utilization of present educational facilities for the preparation of nurses, the way ahead for those responsible for planning nursing service in crippled children's programs should seem less confusing than a year ago. Careful study and careful evaluation of the performance of nurses in the programs will be the best test of the efforts that have been expended.

NOTE: A list of schools for physical therapy technicians that conform to the standards adopted by the American Medical Association in 1936 was published in PUBLIC HEALTH NURSING, June 1937, page 354. This list is reprinted, with up-to-date information regarding the entrance requirements, length of course, tuition, and other data, in the *Journal of the American Medical Association*, March 26, 1938, page 982. The course offered by the Hospital for Ruptured and Crippled, New York, N. Y., appears on the revised list.

Gentle Presence

By Virginia Scott Miner

AS ONE is suddenly aware
Of what he scarcely sees,
I turn—and lo, the rocking chair
Is moving in the breeze.

I saw no figure, saw no face—
I knew it was the air—
Yet felt for one brief moment's space
My mother's presence there!

—*National Parent-Teacher*, July 1937

In Memoriam

It seemeth such a little way to me,
Across to that strange country,
The Beyond;
For it has grown to be
The home of those of whom I am so fond.

And so for me there is no Death,
It is but crossing, with abated breath,
A little strip of sea,
To find one's loved ones waiting on the shore
More beautiful, more precious, than before.

THE BEYOND, an anonymous poem on the wall in the famous Little Church of the Flowers, Forest Lawn Memorial Park, Glendale, California.

MRS. ANNE LYON HANSEN, the Director of the Visiting Nursing Association of Buffalo, New York, died at her home in Buffalo on March 11.

Mrs. Hansen, a native of Leeds, England, graduated from the Buffalo Children's Hospital Training School, and had been the director of the Visiting Nursing Association of Buffalo since 1915. Mrs. Hansen was president of the National Organization for Public Health Nursing from 1926-1930. Her interests in nursing were many and varied, and she served both nurses and nursing in many capacities. She was a past president of her alumnae association, of the New York State Organization for Public Health Nursing, and of the New York State Nurses' Association. She was formerly treasurer of *The American Journal of Nursing*, and after retiring as president of the National Organization for Public Health Nursing she served as a member of the Board of Directors. She was a member of the Board of Directors of the New York State Nurses' Association, and in recognition of her ability and her untiring efforts in behalf of the nurses of that state, was made an honorary member of the Association.

MRS. ANNE L. HANSEN, R.N.

Mrs. Hansen had so many of the qualities we admire in the British—venturesome, vigorous, with a tenacity of purpose. She was honest and outspoken and always had the courage of her convictions—qualities that made her a successful administrator and propagandist.

Reared in the rugged school where successful achievement was contingent upon long hours and arduous toil, she endured both willingly for the causes she loved—better service to people on one hand and better conditions for nurses on the other. Earnest in purpose and forceful in action, she gained and retained public confidence and the respect and esteem of her professional associates.

Nursing has lost an able protagonist, but it can never lose what she has done for it. Nurses have lost a brilliant leader, but the spirit that made her one will continue its influence. Some of us have lost a dear and well beloved friend.

Again in May we are listing those public health nurses who have died during the last year, and as before we are requesting our readers to send us word when any of our number pass from among us.

Florence French, February 10. Public health nurse, District Nursing Association, Portland, Maine.

Ethel M. Hanson, November 14. Cleveland, Ohio.

Sister M. Frances Herb, September. Engaged in health work in the Society of Catholic Medical Missionaries whose headquarters are in Washington, D. C. Died from malignant malaria.

Thora Kronmann, September 11. Public health nurse, Palama Settlement, Honolulu, Territory of Hawaii.

Mrs. Sophie Rutoska Kucera, April 15. Field nurse, Milwaukee Health Department, Milwaukee, Wisconsin. On February 23, she completed 23 years of service.

Victoria Liebreich. November 23, Waterbury, Connecticut.

Olive E. Ludy, August 4. Winchester, Indiana. Public health nurse, Muncie city schools.

Mrs. Mary Mose, January 1938. Decatur, Illinois.

Julia E. Reynolds, December 5. Supervisor, Hamden Public Health and Visiting Nurse Association, Hamden, Connecticut.

Mrs. Adalaide Russell, December 2. Public health nurse, Public Health Nursing Association, Rochester, New York.

Mrs. Belle M. Wagner, August 8. Instructor in Obstetrics, Peiping Union Medical College, Peiping, China. Former member of N.O.P.H.N. Records Committee. Died from tuberculosis at Saranac Lake, New York.

Mrs. M. J. Wagner. Public health nurse, Fresno, California.

Mrs. Elizabeth R. Ward, September. White Plains, New York.

Eunice Ward, March 22, 1938. School nurse and a former president of the Alabama State Nurses' Association, Montgomery, Alabama.

Mrs. Clarence E. Weiss, July 25. Eau Claire, Wisconsin.

Marcie Wheat, December 22. President, Maryland Organization for Public Health Nursing and member of the staff of the Babies Milk Fund, Baltimore, Maryland.

Margaret Wilmes, December 2. Public health nurse, Visiting Nurse Association, Council Bluffs, Iowa.

Florence Nightingale as a Friend Knew Her

A NEW short biography of Florence Nightingale* has recently come from the pen of one who knew her well during the latter part of her life. Modestly bound in a brown paper cover, this little book was sent to the office of the National Organization for Public Health Nursing by the author, Rosalind Nash, who was a cousin and friend of Miss Nightingale. Distressed at what she considers misinterpretations on the part of many who have read Sir Edward Cook's characterization of Miss Nightingale,** Mrs. Nash has conveyed her own impressions of the "lady with the lamp" in this little "sketch," whose factual material is based on Sir Edward's book.

"I think," she says in the preface, "anyone who knew her would gladly allow to her, and even enjoy, as part of a strong and lovable nature, the occasional forcible utterances of her pen, at which (as his readers will observe) Sir Edward Cook, who had never seen her, was sometimes slightly shocked. . . . I myself had been pleased when he wrote that he thought there must have been 'something at once formidable and fascinating' about her. It was a relief after the older version, according to which she was nothing more than a gentle and devoted nurse; her character was, as Sir Edward says in his introductory note, stronger, more spacious, and more lovable."

*Nash, Rosalind. A Sketch of the Life of Florence Nightingale. The Society for Promoting Christian Knowledge, Northumberland Avenue, W.C.2, London, England, 1937. 32pp. 6d (approximately 10c).

**Cook, Sir Edward T. The Life of Florence Nightingale. The Macmillan Company, New York, 1913.

EDITOR'S NOTE. This review of Mrs. Nash's brief biography of Florence Nightingale is published this month in honor of Miss Nightingale's birthday on May 12.

In addition to telling the well known story of Miss Nightingale's work in the Crimean War, her efforts in behalf of reorganizing the army health and hospital service, and her influence in the development of modern nursing education, Mrs. Nash describes her less known activities in the improvement of sanitary and social conditions in India. She tells how Miss Nightingale, appalled by the deaths of soldiers due to insanitary conditions, included in the topics of her *observations* "bad water, bad drainage, filthy bazaars, native towns." It was obvious that: "Questions of soldiers' health in India could not be kept within the doors of barracks." "An early advocate of statistical method," many years before mortality statistics were accepted as fundamental to a public health program, she secured and assembled data which showed that "the young men in barracks at home, between the ages of twenty and thirty-five, were dying about twice as fast as men of the same ages in twenty-four of our large towns."

"In 1873," writes Mrs. Nash, "she was able to record ten years' progress. The death rate had been brought down from 69 per thousand to 18, and to the common objection of expense it could be answered that £285,000 had been saved on recruits in a single year."

"In other directions there had been surprising and unexampled progress," the author goes on to say, "though, of course, it was a mere trifle compared with what remained untouched. Sanitary control of the vast crowds that came together at fairs and pilgrimages had been instituted; hospitals, prisons, and asylums improved; essential sanitary works had been executed in great cities; and there was even a small beginning of sanitary instruction and improvement in villages."

The author describes her memories of Miss Nightingale in the latter's pleasant, airy drawing room or bedroom during her invalid years when she was confined at home, "dressed in a loose black silk dress of the graceful mid-Victorian fashion, but, of course, without a crinoline, which machine she had never worn. Her talk was delightful—sympathetic and kind, vigorous, gay, bracing, sometimes downright."

Referring to Miss Nightingale's life outside of her work, Miss Nash says that her "comfort and her great resource was her religion, which had always been behind her work." The characterization closes with this delightfully human touch: "Her most worldly relaxations were writing to M. and Mme. Mohl, and enjoying the company of the beautiful Persian cats they sent her (M. Mohl was a Persian scholar and had friends in Persia). One or two of these, or some highborn kittens—Darius, Cyrus, Artaxerxes, Shah, and others with mere Saxon names—were usually with her, and were a great pleasure. She thought the companionship of pet animals good for sick people . . . Birds, which she used to feed at her window, and even squirrels, had confidence in her."

This little biography is very readable, objectively written despite the author's warm feeling for her relative, and convincing.

The Need for Better Care of Mothers and Babies

By MARTHA M. ELIOT, M.D.
Assistant Chief, Children's Bureau, U.S. Department of Labor

Can the Nation afford to lose its mothers and babies through preventable deaths from inadequate care? A graphic picture of maternal and child health needs

A NEIGHBORING state health officer recently came to the Children's Bureau with the story of a back-country woman, up in one of the mountainous counties, who had all but lost her life in childbirth because of the inaccessibility of her home to the main highway. She lived only six miles off the highway, but those six miles were deep sloughs of spring mud impassable for anything except the toughest of cars, and the husband found that the doctors would not be able to get to his wife. After many hours of anxious attempts, he called the county health department for help, and fortunately for the family, found a public health nurse who was willing to walk the six miles. She found that the woman had already been in labor for nearly twenty-four hours and her efforts to locate a doctor who would come to the home were also futile.

Clearly, from the woman's condition, medical help was needed and hospitalization was the only hope. With the father's help, and ingenuity on the part of the nurse, they were finally able to get the patient out to the highway in an old Model-T Ford, found in the back yard, that had no number plates but still would run when coaxed. At the highway they were met by the county health officer, and the story ended happily in a hospital thirty miles away. Having told the story, our state health officer went on to others, not all with the happy ending of the first, but each one showing the urgent needs of these rural women and the despair of the nurse or the health officers or the neighbors or the family because no means were at hand to provide delivery care.

NEED FOR GOOD CARE IN CHILDBIRTH

The need to find some way to care for the large number of women now unable to obtain good care in childbirth has been borne in upon the Children's Bureau with renewed urgency through the reports of state and local health workers regarding their maternal and child-health activities financed through grants under the Social Security Act. Physicians and public health nurses organizing the work for the state or working in the counties told graphic stories illustrating the futility of their efforts to provide medical and nursing supervision to women in pregnancy, when no provision was made for safe delivery by a competent physician or for hospitalization in emergency or for care of the newborn baby—especially the baby born prematurely.

Interviews with rural nurses bring out again and again the hopelessness of telling a pregnant woman that she has high blood pressure and other signs of toxemia and should go to a hospital when she cannot pay for it and there is no other provision for payment, or when it is more than 50 or even 100

miles away. Or of telling her that she must go to her doctor for examination and care when he has already told her that she need not see him until she is in labor.

There is nothing new about these stories. The nurses and doctors working under the Maternity and Infancy Act in the nineteen-twenties told them also, and laid the foundation for many things that are being done today. What are new today are the newly appointed physicians and nurses and nutritionists, and the fresh impetus given to the effort to teach mothers about the care of themselves and their children.

Under the Social Security Act, grants have been made to the states to strengthen the maternal and child-health work in the state health departments and to extend the work into the local communities, especially rural areas or other areas of special need. Considering the size of the job to be done, the grants to individual states are relatively small. They do not go very far toward providing even one public health nurse for each county, to say nothing of approaching the standard of one nurse for each 2000 in the population set up by public health nursing authorities as desirable. Cities now have one public health nurse for every 5000 population, while the rural areas have one for every 11,000. Throughout the United States there are still about a thousand counties without a single public health nurse to serve the rural population.

Funds under the maternal and child-health provisions of the Social Security Act help to provide about 2600 of the 6000 nurses now working in rural areas. But three or four times as many nurses would be needed in the country districts and probably twice as many in the cities as are now employed if reasonably adequate maternal and child-health services, including nursing care at time of delivery, were to be made everywhere available.

More deficient even than the nursing services are the medical services, such as are needed to provide antepartum care through conferences or clinics for women otherwise unable to obtain such care, and infant care and child-health supervision through centers to which mothers take their children for advice. Last year, under the Social Security Act, antepartum clinics or conferences were conducted by physicians in 2900 centers in 33 states, but they served only 500 counties out of the total 3072. Child-health conferences were conducted in 5300 centers in 36 states but only 740 counties were served. There is obvious need for many more such centers.

DELIVERY CARE GREATEST LACK

The medical and nursing care provided at time of delivery is far from satisfactory for many women. An uncounted number of women are delivered by physicians who have had no special training in obstetrics and often but little practical experience in obstetrics when in medical school. Nearly a quarter of a million women in 1936 were delivered by midwives. More than 15,000 did not have the assistance of either a physician or a midwife.

Something must be said also about the major problem involved in the large number of midwives, ignorant and untrained, who are delivering a quarter of a million women each year. There is no use in burying our heads in the sand and ignoring this problem. It is one that must be faced. Either we must make it possible for this quarter of a million women to have the aid of physicians at childbirth, or, if the families live in regions too remote from a center of population to have the service of a physician available, we must seriously consider how a skilled attendant can be provided. Whether the training of nurse-midwives is the answer for all such situations is not clear. The problem should be given serious consideration.

Nursing care at time of delivery in the home has been almost entirely lack-

ing for women in the smaller towns and in rural areas, who cannot afford to employ a private nurse. Certain exceptions, however, may be noted—in particular the service developed under the FERA and continuing to a smaller extent under the WPA. Since the establishment of the social-security program, 30 state health departments, in cooperation with local health and welfare agencies, have developed special projects through which qualified nurses—usually public health nurses—are giving nursing care at time of delivery to women in certain small areas. In all these projects the nursing care is given to assist physicians. Kits of sterile equipment for the use of both doctor and nurse are provided in these demonstrations. The nurse can be of great help to the doctor if she is properly trained, and she will do many things to help make this home care safe for the mother and the baby.

DELIVERY NURSING CARE CAN BE GIVEN

Various methods are being worked out in these demonstrations, but the important thing to realize is that such delivery nursing service can be given, and if sufficient nurses are added to the staff, it can be given without interference with other maternal and child-health activities or health-department services. If the job is to be well done, these nurses must be trained in maternity nursing care.

In 1936, of the more than 2 million live births, nearly 900,000 or two fifths took place in hospitals. Nearly three quarters of the births in cities were in hospitals, as compared with one seventh in rural areas. In many hospitals, standards of care for mother and newborn infant are far from satisfactory. There is great need for a systematic scheme of inspection and approval of the smaller hospitals admitting maternity patients, similar to the plan made for the larger ones by the American College of Surgeons.

Inaccessibility or lack of hospitals and inability of families to pay for care often interfere with desirable hospital care for women at delivery. Thirty million people live in areas containing less than a minimum provision of hospital beds. Ten million live more than 30 miles from an approved hospital, often where road conditions, as in the case cited, would make emergency transportation of women in labor well-nigh impossible; and yet between 150,000 and 200,000 births will take place in these families each year.

Few well organized statewide systems of ambulance transportation in this country extend out into the rural areas and bring in to hospitals the acutely ill patient who cannot afford to hire such transportation.

There are also many areas where expert care by physicians is not available. To what extent can we say that adequate care is available for mothers and babies in this country? In some communities, usually the larger cities, care can be obtained for mother and child that cannot be surpassed in any land, and the results of such care are correspondingly good. In other communities, where proper facilities are almost entirely lacking, the care for mother and child is certainly of the worst.

FACILITIES FOR MATERNAL CARE

A questionnaire on facilities for maternal care was sent to state health officers in the spring of 1937 at the request of the State and Territorial Health Officers Conference. Of 49 state health officers who replied, only 2 considered the facilities for maternal care in their states satisfactory. Forty declared the facilities to be definitely inadequate, 7 modified their statements by such remarks as, "Care is inadequate for those who cannot pay," or, "Facilities fair, resources inadequate," or, "Adequate for medical care but not for delivery and nursing services." Questions with regard to the number of general practitioners of medicine who include ob-

stetrics in their practice brought out the response that in 17 states there are not enough general practitioners doing obstetrics and frequently they are poorly distributed in the rural areas.

In some counties, moreover, there are no physicians; in others, only one or two. To be sure, these counties are usually the large, sparsely populated ones of the West where, on the whole, health conditions are fairly good; but it should be remembered that babies continue to be born in these areas and mothers need help even though they do have to live 30 or even 100 or more miles from the nearest doctor. The stories of the struggles of nurses to get help in time of trouble cannot be ignored.

Replies from state health officers to the question regarding numbers and distribution of specialists in obstetrics brought out again the well known fact that there are many areas where such skilled physicians are not available either for regular care of patients or as consultants to assist and advise general practitioners.

DEATHS OF MOTHERS AND BABIES

Let us consider those most important indices of care, namely the death rates of mothers and their newborn infants. It is well known, of course, that the maternal mortality is high in this country. In 1935, 12,544 women died. In addition, 1752 other women who were pregnant or recently delivered died of conditions such as tuberculosis, chronic nephritis, or heart disease that may have been adversely affected by the pregnancy—making a total of more than 14,000 deaths of women associated with pregnancy or childbirth. In 1936, 12,182 mothers died, giving for that year a rate of 57 for each 10,000 live births, or one point lower than in 1935. There are, of course, great differences in the rates of different states, ranging all the way from 91 in Arizona and 90 in South Carolina down to 40 in Rhode Island and New Jersey. If we look at individual counties we find an even wider range, from no deaths at all for a 5-year period up to a rate of more than 200.

During the 22 years for which statistics are available, there has been essentially no decline in maternal deaths until recent years. Now the trend is downward, and the chief improvement is found in reduction of deaths from toxemias of pregnancy, the condition which par excellence is the one affected by proper antepartum care. The deaths from causes associated with the delivery itself have shown scarcely any improvement throughout these years. Deaths from hemorrhage have decreased slightly, but not so deaths from infection or sepsis, which may be largely prevented by good care before or at the time of delivery. Physicians who have studied and analyzed the records of many thousands of these maternal deaths have concluded that one half to two thirds can be prevented.

What about the deaths of newborn babies? For years we have said that great progress is being made in reducing the death rate of infants during the first year of life, but we always have to modify our statement by saying that there has been little progress in reducing deaths of infants during the first month. And yet the deaths in the first month represent half of all deaths in the first year. Actually in 1935, nearly 70,000 infants died before the end of the first month of life, more than 56,000 of them from conditions directly connected with prenatal life or the birth itself. More than half of these early deaths are associated with premature birth. During 21 years, deaths of newborn infants on the first day of life have not decreased at all.

Closely related to these deaths on the first day of life are the stillbirths. Seventy-seven thousand of these were reported in 1935, but this does not represent all, because the reporting is known to be very incomplete and some states

do not report stillbirths at all. The special tragedy of these stillbirths is that nearly half occur in the mother's first pregnancy, and in a very considerable proportion the mothers had had previous stillbirths and no living children. This has been shown in a recent Children's Bureau study. Moreover, the study showed that in more than half the cases in which the mother was at term, the baby was alive at the beginning of labor.

Can these babies be saved? In all probability at least half the babies who die in the first month of life can be saved, if adequate care is given to both mother and baby. This has been demonstrated in many areas, rural as well as urban. The same measures that will reduce maternal deaths will reduce these infant deaths. They will reduce stillbirths also.

WHAT IS NECESSARY?

Good community organization that will insure adequate provision for mothers and newborn infants implies (1) the existence of a good health department under the direction of a full-time health officer, with additional personnel commensurate with the needs of the community including those equipped to serve in the field of maternal and child health; (2) the coöperation and assistance of local physicians qualified to give the necessary care for mothers and their newborn infants and for all other members of the family; (3) the services of specialized consultants in obstetrics and pediatrics, and other branches of medicine; (4) public health nurses sufficient in number to carry a full maternal and child-health program, including care at delivery; (5) adequate hospital facilities; (6) community resources to provide care for those in need. For this local health department there should be suitable quarters for office and conference rooms, a laboratory and consultation rooms for the use of staff and local physicians, and, under some circumstances, x-ray equipment and even a few beds to be used for observation or temporary care of patients on the way to a hospital in larger centers of population.

If good maternal and infant care is ultimately to be made available for all who are in need of care, some such basic health organization is essential, one in which all the citizens will feel that they have an interest, one in which all physicians of the community will participate.

It is estimated on the basis of 1935 income figures that there are approximately 840,000 births in families on relief or with total annual incomes, including home produce on farms, of less than $750. Six hundred and fifty thousand of these, or nearly one third of all the births in the United States, occur in rural areas or in cities of less than 50,000 population; nearly 200,000 occur in larger cities. Raise the income level to $1000 a year and there will be included approximately 1,000,000 births.

The magnitude of the problem of providing for even a part of these families is obvious. Many of them are being cared for today by their local family physician without pay; in some cases welfare departments now pay for delivery care; many of these women, especially those in cities, will be cared for in hospitals. There is still, however, a large group who get only partial care from a physician or nurse, or even none at all. Upon the births in many of these families, however, depends the replacement or the growth of our population. It would seem then to be to the interest of society and the Nation that the unnecessary loss of life of mother and her newborn infant be reduced to the lowest level possible and that the health of all mothers and children be raised to the highest level. To do this, a way must be found to provide the needed care.

Presented at the Conference on Better Care for Mothers and Babies, Washington, D. C., January 18, 1938.

The Rural Nurse's Day

By ROSALIE I. PETERSON, R.N.*

This study suggests a technique which can be used by nurses to analyze their own programs on the basis of activities carried on as shown by the records

THE PREPARATION of a schedule of work by a nurse in a rural health department is complicated by the many urgent problems with which she is daily confronted. Nursing service must be provided in the control of communicable disease including tuberculosis and venereal disease; in maternity and infant hygiene; and in health supervision of the preschool, school, and adult populations. When there is only one nurse in the county as so frequently happens, choosing the work to be done each day is a difficult task, especially if any consideration is given to rendering the service that is most needed by the community. Even when a careful selection of activities has been made and daily schedules have been planned, the nurse is not always able to adhere strictly to her program because of the emergency situations that are continually arising to demand her attention.

In view of these difficulties it should be of interest to determine under practical conditions what proportion of the nurse's time is spent in activities which effectively meet the needs of the community. This article presents a comparison of the activities of two nurses of a bicounty health department over a period of one year. The material for study was derived from the nurses' daily reports. As the writer had no knowledge of the community needs, a direct comparison of activities with the needs could not be made. The study presents a technique which can be used by nurses to analyze their own program on the basis of activities carried on, as shown by records.

The two counties of the bicounty unit were fairly similar in the general character of the health problems presented. The population of both counties was predominantly rural and the economic status of the two counties was fairly similar, with the per capita income of county A $147 and of county B $134.* Not more than ten percent of the population of county A and about fifteen percent of the population of county B resided in the county seats of the two respective counties. There was a high proportion of Negro population in both counties. The main distinction in the two counties was the larger size of county A (see Table I) which merely increased the load upon the nurse in that

TABLE 1

Certain Characteristics of the Counties Served by the Two Nurses

	County A	County B
Area in square miles	557	307
Population	20,000	13,000
School population	5200	2700
Total schools	68	24
Schools for white children	23	5
Schools for Negro children	45	19

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*Mountin, Joseph W. Effectiveness and Economy of County Health Department Practice. Reprint No. 1654 from Public Health Reports, October 19, 1934, p. 1234.

county without changing the essential characteristics or the basic needs for service.

Each nurse was responsible for all the public health nursing activities of a county. Both worked under the supervision of the same health officer, and presumably had the same general objectives for their work. Certain broad state and local policies served to guide the general program. However, no survey of local needs had been made by the county health department which would have helped to guide the activities of the nurses so that the community needs would have been known and could probably have been met. Consequently each nurse planned her work without this knowledge in the way that seemed most effective. Neither plan followed by these two nurses is recommended as ideal. Instead, might not the differences in service as shown in the daily records where comparable needs existed, raise the question as to whether either nurse planned the service she rendered—or whether she simply tried to meet daily the problems as they arose? Was she conscious of problems only in relation to certain activities in which she was most interested?

The two nurses rendered similar types of activity, for each served her respective community through home visits, office visits, school visits, work with groups, and conferences with local leaders and others interested in the community welfare. Unfortunately no data on the amount of time spent in each activity were available on the daily records. Therefore the emphasis that would be shown by a time study cannot be developed in this analysis. Certain inferences, however, are made from a study of the number of days in which each performed the various activities listed above.

The actual number of days during which the nurses performed work of the different types is shown in Table II. On the whole the nurse in county B, hereafter designated as nurse B, varied her daily activities much more than the nurse who worked in county A, or nurse A. She made home visits on 27 percent more days than nurse A, did school work on 7 percent more days, rendered service to individuals in her office on 16 percent more days, and had conferences with community leaders on 11 percent more days. Work with groups in the community was the only activity which nurse A performed on more days than did nurse B. In other words, nurse A has shown a concentrated type of activity and nurse B a diversified type of activity.

It is an accepted axiom that effective program planning should be measured by the degree to which the services rendered meet the needs of the community. By a more detailed analysis of the separate activities of the two nurses, it is possible to gain some

TABLE II

Days of the Study Year All or a Part of Which Were Spent in Certain Types of Activities in the Two Counties

	County A		County B	
	Number of days	Percent[1]	Number of days	Percent[1]
Days on duty	282	100.0	282	100.0
Activities				
Home visits	157	55.6	231	82.2
School work	60	20.6	78	27.6
Work with groups	33	11.7	21	7.5
Conferences	239	84.7	270	96.0
Office visits	57	20.2	103	36.6

[1]The nurses usually performed two or more activities on one day, hence these percentages refer to the proportion of the total number of days that any one activity was carried on.

insight into the marked differences in their program of activity, which may or may not be well correlated with the needs of the community. Through this analysis a technique for studying service in relation to community needs may be developed.

HOME VISITING

Although nurse A made home visits on fewer days than nurse B, the average number of homes reached on the days that she made home visits was approximately 4 as compared with 3 for nurse B. Not only did nurse A reach more families on the days she did visiting, but she also distributed the visits much more in accordance with the location and characteristics (farm or village) of the population. Only 5 percent of the homes visited by nurse A were in the county seat of her county where 10 percent of the population lived, whereas 49 percent of the homes visited by nurse B were in the county seat of her county where only 15 percent of her population resided. In other words, nurse A gave 5 percent of her home visiting time to 10 percent of her population while nurse B gave 49 percent of her home visiting time to 15 percent of her population. Even though nurse B planned her work so that she was able to make more home visits than nurse A, it was done partially at the expense of service to home in the strictly rural areas where the need was as great or greater than the need in the county seat.*

SCHOOL WORK

A comparison shows that nurse B included school work as a part of her program on 7 percent more days than nurse A. Despite this fact, nurse B made no inspection of pupils in 2 of the 5 schools for white children** and 7 of the 19 schools for colored children, whereas nurse A inspected pupils in 22 of the 23 schools for white children and 27 of the 45 schools for colored children. Nurse A inspected 564 children, while nurse B inspected 635 children. In other words, nurse A distributed her work so that a few children in the majority of the schools of the county were inspected, whereas nurse B seemed to do a more intensive job in a few schools.

It is impossible to judge from a nurse's daily record whether the health needs were concentrated in a few schools or distributed among all schools, but in view of a state law requiring teachers to make an inspection and a health department regulation requiring the nurses to inspect pupils referred by the teacher, the program followed by nurse A would seem to comply more closely with the state law and the health department practice.

A question then immediately arises: Was the nurse aware of the health problems in the schools that she did not visit? Further analysis showed that nurse B centered her school activities in the school located in the county seat. She visited this school on 56 percent of the days that school work was included in her program. Apparently from the records, she made visits to this school without any definite purpose, since frequently less than a dozen individuals were seen for communicable diseases, or only 3 or 4 physical inspections were made.

One of the most striking contrasts in the way in which these two nurses conducted their work is shown in the distribution by months of their inspections for communicable diseases in the school. In Table III is shown the number of children inspected for communicable disease each month of the study year.

It is evident that a much smaller number of inspections for communicable disease were made by nurse A than by nurse B. However, nurse A concentrated her inspections for communicable

*Mountin, Joseph W., Pennell, Elliott H., and O'Hara, Hazel. Relationship of a Rural Health Program to Needs in the Area. Public Health Reports, September 10, 1937.

**These were small schools reported to be poorly attended.

disease in the winter months when the major communicable diseases as a rule are more prevalent, while nurse B included this activity in her program for every month of the school year. Although data are not available on the monthly incidence of communicable disease in the two counties, it seems unlikely that county B had very much more contagion than county A in view

TABLE III

Number of School Children Inspected for Communicable Diseases in the Two Counties, by Months of the Study Year

Months of the study year		County A	County B
Total		282	428
1932	April	—	88
	May	—	57
	June	—	2
	October	67	25
	November	—	24
	December	2	26
1933	January	32	18
	February	96	96
	March	85	91

of the fact that these are contiguous counties with the same general characteristics, and especially since county B is much smaller than county A. Evidence supplementary to the records made by the nurses indicates that much of the communicable disease work of nurse B was done at what she termed "impetigo clinics." Nurse A gave little or no attention to minor skin infections.

CONFERENCES

Another difference in the way these two nurses planned their programs is shown by the number of days in which they had conferences with leaders in the community and also by the number of such conferences which were held. Nurse B included conferences in her program on 11 percent more days than nurse A, and had a total of 1054 conferences in the study year as compared to 847 for nurse A. The type of individual with whom the two nurses conferred differed even more widely than the number of conferences held. These differences appear in Table IV.

TABLE IV

Type of Individuals with Whom Nurses Conferred During the Study Year and Number of Such Conferences

Type of individual with whom nurse conferred	Number of conferences	
	Nurse A	Nurse B
Physicians	166	544
Health officer	121	70
Poormaster	101	22
Midwife	46	145
Other	413	273
Total	847	1054

The large number of conferences which nurse B held with physicians is the outstanding difference in these tables. Normally, conferences with physicians are desirable, but when these visits were probed more completely, it was found that nurse B had a conference with each of two private physicians in the county almost every day; sometimes she conferred with one of them twice a day. Neither physician had any official connection with the county health department. It is impossible to determine from the records what subjects were discussed at these conferences as the nurse failed to record the object of the visit. It is therefore unknown whether many conferences were in regard to the same individual and whether the visit was in relation to morbidity, health supervision, maternity, or the control of contagious diseases. This lack of information may be due to faulty or poorly filled out daily records, but unless the nurse makes the necessary notations on her records, will she be able to measure to what extent her services are meeting the needs of the community?

The larger number of conferences which nurse A held with the health officer can possibly be explained in terms of his greater accessibility, since both he and the nurse had offices in the same building. Possibly the frequent visits to the poormaster were occasioned by the fact that medical care for the needy was provided by the physicians in the county when the service had been authorized by the poormaster. Nurse A

held conferences with individuals classed as "other" much more frequently than did nurse B. This group was made up of conferences with leaders in the community on matters concerning policies of the organization, preparation for clinics, and similar items.

WORK WITH GROUPS

Nurse A arranged more group work in the form of classes for midwives, mothers' clubs, and home-nursing demonstrations than did nurse B. (Table V.)

TABLE V

Number of Days That Group Meetings Were Included in the Programs of the Two Nurses

Activities	Nurse A	Nurse B
Classes for midwives	7	2
Mothers' clubs	9	2
Home-nursing classes	18	8
Demonstrations	20	18

The greater number of midwife classes held by nurse A may account for the fewer individual conferences with midwives recorded in Table IV. Unfortunately the records do not provide data on the attendance at these group meetings, as the nurses failed to fill in this portion of the record. Still, nurse A probably should be credited with having planned more for the conservation of her time through group effort than did nurse B.

MISCELLANEOUS ACTIVITIES

There were two or three other outstanding differences in the activities included in the two nurses' programs as shown in Table VI.

Although bedside nursing was not regarded as a regular activity as a matter of policy, the program of both nurses included this service. Nurse A reported much more of this type of work than nurse B. On the other hand nurse B rendered a greater amount of "social service" and more frequently transported patients to physicians' offices or to clinics.

TABLE VI

Number of Days Certain Types of Services Were Rendered by Nurses of a Bicounty Health Department

Service	Nurse A	Nurse B
Bedside care	35	13
Social service	27	97
Transportation	8	30

SUMMARY

From an analysis of daily reports, it is possible to determine the plan that nurses follow in carrying out their work. From such a study for two nurses working in separate units of a bicounty health department, it has been shown that even with the same general supervision and the same type of health problems, nurses may carry on programs that show very different methods of working.

A summary of the differences in the activities of the two nurses is presented in the following tabulation. The characteristics of the work of nurse A appear in the left-hand column while those of nurse B appear on the right.

A technique for the analysis of service

CHARACTERISTICS OF THE DAILY ACTIVITIES OF:

Nurse A

1. Tended to concentrate on 1 or 2 activities each day
2. Spread her work over the county in relation to the distribution of the population
3. Visited schools less frequently, but reached a large proportion of the schools
4. Performed inspections on fewer school children for control of communicable disease
5. Conducted more group conferences and meetings
6. Rendered more bedside nursing care to her clients

Nurse B

1. Carried out a more diversified daily program
2. Concentrated the major portion of her work in and around the county seat
3. Visited schools on more days, but visited the same school most of the time
4. Inspected many school children for communicable disease (many for impetigo)
5. Held more private conferences especially with physicians
6. Provided transportation and rendered social service to her clients more frequently

from a study of daily reports has been presented, which can be used for either the nurse working alone or for a staff nurse. In the latter position, a comparison of activity among the members of the staff can be made, as has been done in this paper. The method presented can also be used for self-analysis by the individual nurse. For either group, this type of analysis should present two important questions. First, does this analysis of daily activity show that the community needs are being met or does it show only a personal interest of the individual nurse in certain organizations, techniques, and professional problems? If the analysis shows only a special interest on the part of a nurse working in a generalized service, should not the nurse question whether this is due to personal interest or whether it is based upon a special need in the community?

Second, does this analysis give a supervisor a picture of the strengths and weaknesses of the program so that greater help can be given to the nurse to render a service that will satisfy the needs of the community? If this method of analysis of activities stimulates a nurse to question and to study the quality of the service she is rendering, she, together with her supervisor and administrator, can survey the needs of the community and outline a plan which in the future will help the public health nursing service to meet those needs more adequately.

This study was made under the Division of Public Health Methods, National Institute of Health, in coöperation with the Division of Domestic Quarantine.

AMERICAN JOURNAL OF NURSING FOR MAY

NOTES *from the* NATIONAL ORGANIZATION FOR PUBLIC HEALTH NURSING

MRS. ANNA J. MILLER RESIGNS

For four years Mrs. Miller has been our statistician here at the N.O.P.H.N. and when, in March, she was forced to tender her resignation because of ill health, it was so disturbing that the general director forgot to prepare the announcement in time for our April magazine! The news is written now with deep regret and a genuine appreciation of Mrs. Miller's contribution to our public health program. Mrs. Miller was just beginning to free her time for advisory visits in the field and she leaves us at a point when it is hardest for the N.O.P.H.N. to spare her. Our best wishes go with her for a speedy return to health.

Fortunately, in accordance with a long-standing N.O.P.H.N. policy, Mrs. Miller has had an assistant, Mabel Reid, who has stepped competently into the breach and is helping us tide over the emergency.

WITH THE STAFF

For the first time all of the N.O.P.H.N. staff members attended the Biennial Convention which was held the last week in April in Kansas City, Mo. With the exception of Virginia Jones, the staff spent the first three weeks of April in the office, making only a few short trips to nearby places.

Dorothy Deming spoke at the annual meeting of the Visiting Nurse Association of Morristown and the Morris County Tuberculosis Association on April 4 in Morristown, N. J. On April 11, she gave a talk on the program of the N.O.P.H.N. to a group of students taking the course on Current Trends in American Nursing at Teachers College, Columbia University, in New York City.

Ruth Houlton went to Trenton, N. J., on April 12 to attend an S.O.P.H.N. committee meeting and also to hold a conference with some of the board members of the newly organized Visiting Nurse Association of Trenton.

Evelyn Davis spent April 8 in Yorktown, N. Y., conferring with the local lay committee there.

Virginia Jones left the office on March 30 for a long stay in the field. She visited public health nursing courses at Duquesne University, Pittsburgh, Pa., March 30 to April 1; Indiana University, Bloomington, Ind., April 4 and 5; University of Chicago and Loyola University, Chicago, Ill., April 6 to 8; Wayne University, Detroit, Mich., and University of Michigan, Ann Arbor, April 11. The rest of the month she spent in Michigan visiting the rural practice fields of the public health nursing course of the University of Michigan, going to Isabella, Newago, and Eaton Counties and to Charlotte, Mich.

(A tribute to Mrs. Anne L. Hansen, N.O.P.H.N. Board Member who died March 11, is on page 308.)

HONOR ROLL

Here are 107 new Honor Roll members, bringing the total of 1938 agencies having 100 percent N.O.P.H.N. enrollment up to 250. We think it is splendid to be able to honor all these agencies but we want you, too, to have a Certificate of Honor and a listing in the magazine. So let us know just as soon as every member of your staff—even though it be a one-nurse service—is a member of the N.O.P.H.N.

Asterisks denote the number of years an agency has been on the Honor Roll,

up to five years; the dagger indicates those agencies which have been Honor Roll members for five years or more.

ALABAMA
- ****Tallapoosa County Health Department, Dadeville
- **Geneva County Health Department, Geneva
- *Lauderdale County Health Unit, Florence
- ***Walker County Health Department, Jasper
- ****Perry County Health Unit, Marion

ARIZONA
- **Clemenceau Public Schools, Clemenceau

ARKANSAS
- ***Metropolitan Life Insurance Nursing Service, Hot Springs

CALIFORNIA
- **Metropolitan Life Insurance Nursing Service, Fresno
- **Metropolitan Life Insurance Nursing Service, Oakland
- *Metropolitan Life Insurance Nursing Service, Palo Alto
- *Metropolitan Life Insurance Nursing Service, Riverside
- *Metropolitan Life Insurance Nursing Service, San Bernardino
- ****Metropolitan Life Insurance Nursing Service, San Diego
- †Visiting Nurses of San Diego, San Diego
- *Metropolitan Life Insurance Nursing Service, Santa Ana

COLORADO
- *Metropolitan Life Insurance Nursing Service, Pueblo

CONNECTICUT
- ***The Visiting Nurse Association of Bridgeport, Inc., Bridgeport
- †Public Health Nurse Association, Darien
- †District Nurse Association, Middletown
- †Public Health Nursing Department of the United Workers, Norwich
- ***Old Lyme Branch, American Red Cross, Old Lyme
- ***Portland District Nurse and Welfare Association, Portland
- *Washington Visiting Nurse Association, Washington Depot

FLORIDA
- *Board of Public Instruction, Fort Myers
- *Charlotte County Health Department, Punta Gorda

GEORGIA
- *Wheeler County Health Department, Alamo

IDAHO
- *Metropolitan Life Insurance Nursing Service, Boise

ILLINOIS
- **Child Welfare Association, Danville
- ***City Board of Health, Winnetka

INDIANA
- *Steuben County Health Department, Angola
- †Public Health Nursing Association of Indianapolis, Indianapolis
- ***Metropolitan Life Insurance Nursing Service, Kokomo
- ***Metropolitan Life Insurance Nursing Service, New Albany

IOWA
- †Visiting Nurse Association, Council Bluffs
- *Dubuque County Health Department, Dubuque
- †Waterloo Visiting Nursing Association, Waterloo

KANSAS
- *Dodge City Public Schools, Dodge City
- *City Health Department, Kansas City
- *Leavenworth County Chapter, American Red Cross, Leavenworth
- *Sedgwick County Department of Health, Wichita
- ****Wichita Public Health Nursing Association, Wichita

KENTUCKY
- ***Metropolitan Life Insurance Nursing Service, Hopkinsville
- **Metropolitan Life Insurance Nursing Service, Madisonville

LOUISIANA
- *Jefferson Davis Parish Health Unit, Jennings

MAINE
- *Kittery Public Health Association, Kittery

MASSACHUSETTS
- †Arlington Visiting Nursing Association, Arlington
- ****Canton Hospital and Nursing Association, Canton
- ***Berkshire Health District, Great Barrington
- †Franklin County Public Health Association, Greenfield
- †Quincy Visiting Nurse Association, Inc., Quincy
- ****Community Health Association of Richmond and West Stockbridge, Richmond
- *Sudbury Public Health Nursing Association, South Sudbury
- †Visiting Nurse Association, Springfield
- *Waltham District Nursing Association, Waltham

MICHIGAN
- *Harper Hospital Out Patient Nursing Service, Detroit
- †Visiting Nurse Association, Detroit

MINNESOTA
- ***Jackson County Nursing Service, Jackson
- †St. Paul Family Nursing Service, St. Paul

MISSISSIPPI
- ***Coahoma County Health Department, Clarksdale
- *Oktibbiha County Health Department, Starkville

MISSOURI
****Metropolitan Life Insurance Nursing Service, Clayton
*Jackson County Health Department, Independence

MONTANA
***Metropolitan Life Insurance Nursing Service, Butte
*Teton County Nursing Service, Choteau
*Metropolitan Life Insurance Nursing Service, Great Falls

NEW JERSEY
***Visiting Nurse Association of Somerset Hills, Bernardsville
**Central Bergen Visiting Nurse Service, Hackensack
****Moorestown Visiting Nurse Association, Moorestown

NEW YORK
*State Health Department, Geneva
*Metropolitan Life Insurance Nursing Service, Glens Falls
*Metropolitan Life Insurance Nursing Service, Kingston
†Visiting Nurse Association, Mount Vernon
*National Surety Corporation, New York
*Metropolitan Life Insurance Nursing Service, Oneida
*Metropolitan Life Insurance Nursing Service, Poughkeepsie
****Public Health Nursing Association, Inc., Rochester

NORTH CAROLINA
*Greene County Health Department, Snow Hill

OHIO
***Metropolitan Life Insurance Nursing Service, Steubenville

OREGON
*Metropolitan Life Insurance Nursing Service, Eugene
*Metropolitan Life Insurance Nursing Service, Salem

PENNSYLVANIA
****Lewisburg Community Nurse Association, Lewisburg
*Metropolitan Life Insurance Nursing Service, Norristown
†Henry Phipps Institute, Philadelphia
†Negro Bureau of Nursing, Philadelphia
**Pottstown Public Schools, Pottstown
*Southern Schuylkill Chapter, Pottsville

RHODE ISLAND
*School Department, Cranston
****Jamestown Branch, American Red Cross, Jamestown
†Visiting Nurse Association of Pawtucket and Central Falls, Pawtucket
**Bureau of Child Hygiene, State Department of Public Health, Providence

TENNESSEE
†Williamson County Health Unit, Franklin

TEXAS
*Val Verde County Health Department, Del Rio
†Department of Public Health and Welfare, Fort Worth
***Harris County Health Department, Houston
***Bexar County Health Department, San Antonio
**Bell County Health Unit, Temple
*Wilbarger County Health Department, Vernon

UTAH
*Metropolitan Life Insurance Nursing Service, Ogden
†Metropolitan Life Insurance Company, Salt Lake City
†Utah Tuberculosis Association, Salt Lake City
†Salt Lake Visiting Nurse Association, Salt Lake City

VERMONT
***Visiting Nurse Association, Burlington

WASHINGTON
*Metropolitan Life Insurance Nursing Service, Everett
****Metropolitan Life Insurance Nursing Service, Spokane
†Public Health Nursing Association, Tacoma

HAWAII
****Palama Settlement, Honolulu
*Territorial Board of Health, Wailukii

JOINT VOCATIONAL SERVICE

announces the following placements and assisted placements for March 1938:

PLACEMENTS

Elsa Bloomquist, Supervising Nurse, Hamden Public Health and Visiting Nurse Association, Inc., Hamden, Conn.

Alma Rae Weber, Camp Nurse, Hemlocks, Bridgeport Visiting Nurse Association, Bridgeport, Conn.

To Staff Positions

Annie May January, American Red Cross, San Francisco, Calif.

Mrs. Bessie Rice Robinson, Judson Health Center, New York, N. Y.

Frances Kurtzman, Henry Street Visiting Nurse Service, New York, N. Y.

Marion A. Brown, Temporary, Metropolitan Life Insurance Company Service, Jamaica, Long Island, N. Y.

Josephine Zimmerman, Association for Improving the Condition of the Poor, New York, N. Y.

(Continued on page 336)

HIGH POINTS in SCHOOL HEALTH

FINDING THE HARD-OF-HEARING CHILD

Various tests for the discovery of children who are hard-of-hearing are described here

MANY DEGREES and types of hearing impairment are found, ranging from an amount just barely detectable to severe deafness, approaching total loss of hearing. The handicap of severe deafness has long been appreciated, especially if it is made apparent by muteness. A school for the deaf and dumb was established in Hartford, Connecticut, in 1817 and many schools for the deaf have been established since that time. However, little was done for persons having only a moderate loss of hearing ability until about the beginning of the twentieth century. This lack of consideration was due to the fact that their hearing impairment was not so obvious and there was little or no appreciation of their problems.

However, the hard-of-hearing persons themselves were keenly conscious of the handicaps of impaired hearing. Moreover, a large number of them had organized the American Society for the Hard of Hearing, and they acted through their organization. They knew of the difficulties of hard-of-hearing children in school. They also knew that ear disorders respond more readily to treatment in the early stages. Accordingly the Society undertook to interest various agencies in programs to find children with defective hearing and to make an effort to restore them to normal hearing or assist them in their education.

The Society appreciated the fact that the hearing-test methods existing at that time (about 1924), requiring individual testing of the children, were so slow that no widespread adoption of them could be expected. They therefore sought for some procedure which would make it possible to test the hearing of school children in large groups. As a result of the efforts of this Society there was developed by Bell Telephone Laboratories electrical apparatus with which it was possible to test a group of as many as forty children at one time. This equipment was termed a phonograph audiometer because it was essentially a phonograph to which had been added some telephone receivers to adapt it for testing hearing.

The equipment reproduces from a phonograph record a man's voice and a woman's voice reciting digits in a manner as though the speakers were receding from the listening children. The sounds are not transmitted through the air. Instead, the voice vibrations on the phonograph record are transformed into electrical vibrations which are conveyed through wires to telephone receivers. As long as the children are able to hear, they write the digits on blank forms with which they have been provided. The loudness of the consecutive digits decreases in measured, uniform steps.

Courtesy of the New York League for the Hard of Hearing

Testing children's hearing in a New York City public school—WPA Project 51.*

By comparing the digits recorded by each child with a correct master sheet it is possible to assign a rating to the child's hearing ability.

The phonograph audiometer has found wide application. Replies to a questionnaire sent to cities, townships, counties, and other agencies conducting hearing tests showed that during the school year 1936-1937 the hearing of over one million children was tested with audiometers. The results showed that almost six percent of the children had measurably impaired hearing. Having found these children, it was possible in many instances by otological treatment to restore their hearing to normal. In other cases the children were given lip-reading instruction to assist them in overcoming the handicaps of their hearing impairment.

PHONOGRAPH AUDIOMETER TEST

The accompanying picture shows a phonograph audiometer in use in a classroom. In the picture each child is wearing a telephone receiver and is ready to write the digits heard through the telephone receiver. The telephone receivers are connected to the audiometer by wires which are furnished as part of the equipment. As many as forty children may be tested at one time. A group of this size is about as large as can be handled satisfactorily. Children in the third year of school and above can be tested with the equipment.*

The audiometer tests the hearing of the ears separately—first the right ear and then the left. Between tests a rest period is usually declared. This interval affords an opportunity for obtaining information regarding earaches, running ears, and noises in the ear. Questions covering these points appear on the blank form given the children. The data thus accumulated serve to supplement the objective findings of the audiometer test.

*When tests are being conducted the cover of the audiometer should be down and the pupils as far from the machine as the length of the cords will allow.

*The manufacturers issue instruction booklets describing the operation and maintenance of their group equipment. Valuable suggestions will also be found in a pamphlet by Ena G. Macnutt. Group Hearing Tests. Pamphlet No. 107. Obtainable from the American Society for the Hard of Hearing, 1537 35 Street, Northwest, Washington, D. C.

The test procedure in which the voice fades out as though the speaker were walking away from the listener is repeated four times for each ear, twice by a woman speaker and twice by a man. To the child listening it seems as though the speaker is close by at first and then walks away, only to come back in a quick jump and then move away again as before. The purpose of this is to afford the child four opportunities of hearing. While the first series of numbers is being pronounced, the child may not understand what is expected of him or he may be distracted by some unexpected noise, but in four tests he is usually able to comprehend and to have an opportunity unhindered of making the best showing of which he is capable.

The time required for testing a group of forty children will vary from twenty to thirty-five minutes, depending on the age of the children. With the younger children more time is consumed in assembly and dismissal, and in informing them of the test procedure. On the average, however, when a whole school is tested it has been found that about eighty children can be tested in an hour. This assumes preliminary organization of the tests so that a new group may be assembled quickly to take the place of the group whose hearing has just been tested.

Courtesy of Bell Telephone Laboratories

Grading a phonograph audiometer test

MASKING EFFECTS OF ROOM NOISE

A hearing test must be conducted in a quiet place. There is no way that allowances can be made for the effects of noise on the results of a hearing test. Corrective procedures have been proposed but they are basically unsound. Noise masks speech and makes it more difficult to hear. A child with normal hearing will be handicapped by a small amount of noise in the room in which the test is conducted and will not turn in a good record. Noise therefore makes it impossible to differentiate with certainty between a normally hearing child and one with a small hearing loss. Unless the tests are conducted in a very quiet place the results will not be satisfactory.

HARD-OF-HEARING BOUNDARY

The normal ear has a tremendous functioning range. It hears very faint whispered speech or voices at a distance, and yet it tolerates a shout close to the ear. Measurements have been made to determine this range in physical units and it has been found to be 120 decibels (or sensation units). This corresponds to an intensity ratio of one million million to one.

A hearing loss of 9 decibels is definitely measurable. A loss of only this amount will not cause a person serious difficulty, but its existence may and often does indicate the susceptibility of the ears to deafness and it may be that unless corrective and preventive steps are taken, the hearing loss will increase. Accordingly many cities have established an arbitrary boundary line of 9 decibels

as indicating that a child is hard-of-hearing to the extent of warranting a follow-up.

The accompanying reproduction of a child's record blank shows the method of grading the test. This particular record shows a loss of 15 decibels in the right ear and normal hearing for the left ear.

RETEST

It is advisable to retest all children having an indicated hearing loss of 9 or more decibels in either ear. This retest will eliminate a number of children who failed only because of inattention or nervousness, or through misunderstanding—not because their hearing was subnormal.

SELECTION OF AUDIOMETER

There are on the market several makes of audiometers which employ the phonograph principle. While it is highly desirable for them to yield uniform results this has not as yet been accomplished. Audiometers should be standardized and several agencies are acting toward that end. The American Standards Association and the Council on Physical Therapy of the American Medical Association have already formulated requirements for the diagnostic type of audiometer used by otologists, and it is expected that requirements will likewise be formulated for the group-testing type. Eventually the National Bureau of Standards will probably have facilities for calibrating audiometers and for checking their performance. Until that time information regarding the equipment available can probably best be obtained from either the Volta Bureau, Washington, D. C., or the American Society for the Hard of Hearing, Washington, D. C. Both of these organizations keep well informed regarding developments in the field.

The phonograph audiometer cannot be used successfully for testing groups of children below the third grade since it requires the ability to write numbers without difficulty. It is necessary to test younger children individually. The individual tests may also be feasible in rural schools where the number of children to be tested is not large. Several methods will yield dependable results when the tests are conducted carefully in a quiet room.

Where an audiometer is available it may be used for a test of each child's hearing individually by having him repeat the numbers he hears instead of writing them. The person conducting the test grades the child's hearing as the test proceeds.

WATCH-TICK TEST

Where no audiometer is available, one alternative method of test consists in determining the distance at which a child can hear the tick of a watch. Different watches may not have the same loudness of tick but many watches can be calibrated readily for use in hearing tests. All that is required is to determine the distance at which it is possible for a number of persons of known normal hearing to hear the watch tick in a quiet room.

Let us assume that this distance turns out to be 48 inches. Then in subsequent tests the result is expressed in relation to 48 inches. For example, if a certain child could only hear the watch tick at 24 inches the result would be expressed as 24/48 or 1/2. The value 1/3 corresponds to a hearing loss of 9 decibels, the boundary usually established for selecting children in the phonograph audiometer test. A child who cannot hear the watch tick at distances greater than one third of the normal distance (16 inches for the watch discussed above) has some impairment of hearing.

About 15 to 18 children can be tested in an hour by this method. Each ear is tested separately. The ear not under test is stopped up by the child by pressing his finger on the tragus (the tab of

skin at the front of the outer ear). A watch has been developed* which may be started and stopped by pressure on a control button. A watch of this type is better than the ordinary watch for hearing-test use since it is possible by interrupting the ticking sound to check the validity of the child's responses and determine more accurately the maximum distance at which he can hear. If an ordinary watch is used it is necessary to make several observations of distance both when the watch is withdrawn straight out to the side and when it is brought back toward the child, and to average the results.

WHISPERED SPEECH

The whispered-speech test is applied in a manner similar to the watch-tick test. The tester whispers numbers while moving away from and near to the child until a determination is made of the maximum distance at which correct interpretation is possible. A whisper is more intense than a watch tick and can be heard at a greater distance. This requires a large room for the test, a room not likely to be as quiet as a small one. The results are in general not very accurate. It is felt, therefore, that when individual tests are planned and an audiometer is not available, the watch-tick test should be used for children old enough to coöperate, and that the whispered-speech test should be used only for testing very young children who might be expected to respond to common words but could not coöperate satisfactorily in a watch-tick test.**

RESPONSIBILITY FOR HEARING TESTS

The delegation of responsibility for conducting hearing tests differs in various places. In some states the responsibility is fixed by law and the state board of education is responsible for the conduct of hearing tests; in others the state board of health. In some states no legislative action has been taken regarding hearing tests.

Understanding and skill are required for operating the audiometer machine, handling the children, and interpreting the results. Instructions—and usually an instructor—for teaching the proper procedure in making the tests are available from the companies which sell the machines. The manufacturer's instructions may be supplemented by the reading of various papers prepared by audiometer technicians, and by the observation of tests that are being made under standard conditions and expert supervision. The principles of audiometry are sometimes included in college courses in health education.

School nurses have the opportunity to participate most effectively in any program for the conservation of the health of children. There will be many cases where the school nurse will be called on to be the administering technician and recognized authority in regard to hearing tests. In any case her training enables her to detect and recognize the significance of many conditions which are not apparent to the teachers, and it is her responsibility to interpret the health needs and problems of the children to the teachers. She has, therefore, a strategic and important part to play in the detection and early treatment of deafness.

JOSEPH B. KELLY
Member of Technical Staff
Bell Telephone Laboratories
New York, New York

*Sperry, F. N. An Old Hearing Test Modified. Reprint No. 94. American Society for the Hard of Hearing, 1537 35 Street, Northwest, Washington, D. C.

**Fowler, Edmund P. Method of Testing Very Young Children. New York League for the Hard of Hearing, 480 Lexington Avenue, New York, N. Y.

EDITOR'S NOTE: This is the third in a series of articles on various phases of the problem of deafness, prepared by specialists in this field.

THE BABY'S FIRST TWO YEARS

By Richard M. Smith, M.D. 120pp. Houghton-Mifflin and Company, Boston, fourth edition, 1937. $1.75.

Of the many hundreds of books written on the care of infants for bewildered and tremulous mothers, very few furnish the practical information so badly needed for the daily care of the child. This book, however, does fulfil such a need most adequately.

Here no universal expert is writing from a swivel chair. Here is no chaff and no padding. Dr. Richard Smith writes from the solid basis of years of practice as a specialist in the diseases of children. He discusses only the immediate and practical problems of the daily work with the infant, the ignorance or understanding of which makes motherhood painful or happy. It is remarkable how precisely and at the same time adequately the author answers most of the common and troublesome questions so often asked by parents: What shall I feed my three-months-old baby? When may I offer him meat and bananas? Why does my baby cry so much? What precautions shall I take in traveling? And many other similar questions.

If there is one chapter that is more valuable than the rest, it is the one on sickness, in which the mother is given concrete working information for more effective handling of her child. The last chapter, "A Typical Day," is an ingenious case history method of demonstrating the practical routine of daily care.

It is interesting to see the minor differences in practices between the East and the West. The author starts his newborn babies with a 50 percent milk mixture to which a 5 percent sugar is added. In our part of the country we use a 66 percent mixture and 10 percent sugar. Dr. Smith waits until six months before he introduces cereals into the diet, and twelve months before offering potatoes, bananas, and meat. In the Middle West, the doctor would be torn to pieces if he waited that long. One could also ask whether three teaspoonfuls of codliver oil a day is more beneficial than one teaspoonful a day.

I shall be glad to recommend the use of this book to all my patients.

MAX SEHAM, M.D.
Minneapolis, Minnesota

TWO BOOKS ON SAFE MOTHERHOOD

Safely Through Childbirth
Childbirth Yesterday and Today

By A. J. Rongy, M.D. 192 pp. each. Emerson Books, Inc., New York, 1937. $2 each.

These two small volumes, each less than 200 pages in length, are written as companion books, but each is a unit in itself.

Safely Through Childbirth is planned to help the physician explain to his patient the changes caused by pregnancy and childbirth and the reasons for medical procedures. Simply and clearly told with abundant illustrations, this discussion gives answers to the questions most frequently asked by the expectant mother about herself and her child and gives also general guides for her behavior.

Childbirth Yesterday and Today tells an interesting story of the childbirth methods and techniques used from the beginning of history to the present time. It shows the varying attitude toward mothers and babies at different periods in history and the gradual evolvement of modern scientific procedure from the ignorance and superstitions of the past. The last two chapters discuss the situation today with its vast increase in

knowledge but with its continuing high incidence of sickness and death among mothers and newborn babies. The author lists reasons for the particularly high morbidity and mortality rates of mothers in this country. The solution of the problem he thinks will be found only when women themselves are more concerned about it. "Reforms," he says, "can come about only as a result of pressure from the women of the country." R.H.

THREE BOOKS ON OBSTETRICS

Nurses' Handbook of Obstetrics. By Louise Zabriskie. 724pp. J. P. Lippincott Company, Philadelphia, fifth edition revised, 1937. $3.

Obstetrics for Nurses. By Joseph B. Delee, M.D., and Mable C. Carmon. 659pp. W. B. Saunders Company, Philadelphia, eleventh edition, 1937. $3.

Obstetric and Gynecologic Nursing. By Frederick H. Falls, M.D., and Jane R. McLaughlin. 492pp. The C. V. Mosby Company, St. Louis, 1937. $3.

These three books in the field of obstetrics offer to the public health nurses much new information for study and review material for reference.

Miss Zabriskie in this fifth edition has added a chapter on Newer Developments which is particularly pertinent for the older graduate who has not had the advantage of recent work in the hospital. It will familiarize her with the use of the newer drugs, the latest treatment of complications, endocrinology in relation to obstetrics, vitamin requirements, and diagnostic methods such as the use of the x-ray and the various tests for pregnancy.

Our old friend, Dr. DeLee's *Obstetrics for Nurses,* has a new nursing angle contributed by Miss Carmon. To the public health nurse the chapter on the home delivery and home care will be particularly valuable. The emphasis on asepsis and the part which the nurse plays in maintaining it is ingeniously emphasized from every angle and for every procedure. The glossary on green paper is easily used and complete.

Dr. Falls and Miss McLaughlin have combined obstetrical and gynecologic nursing in an entirely new volume. The public health nurse will find Part II on gynecology particularly valuable for reference. Emphasis is placed on the importance of the patient's history in arriving at a diagnosis in gynecology. From a study of this section the nurse will have a better understanding of abnormalities and their symptoms and will be better prepared to write a significant history, which is many times her responsibility. The first part of this book devoted to obstetric nursing is written more for the hospital nurse than the public health nurse and little mention is made of the part of the public health nurse in maternity care.

All three books are generously illustrated and much information may be obtained from a study of the drawings and photographs.

Either or both of the first two should be on the reference shelf of all public health nurses doing maternity work and the third will be found valuable from the gynecologic angle.

HELEN A. BIGELOW, R.N.
State Department of Health, Hornell, New York

FATHER'S DOING NICELY

The Expectant Father's Handbook

By David Victor; drawings by Tom Tarre Bevans. 170pp. The Bobbs-Merrill Company, Indianapolis, 1938. $1.50.

A handbook for expectant fathers ought to be written. But, alas, this one is largely sham. Ninety percent of its information may be found in handbooks for expectant mothers—of which there are more than enough. When a real problem of the expectant father is approached, as for example what he shall do with his love life during the wife's pregnancy and parturition, we find that "obviously" no concrete advice can be given. All that is necessary is for the wife to obtain the information from her physician. Yet this same physician is far from having the author's confidence in the matter of making a prenatal examination. And we are definitely advised not to take the

doctor's advice if he is old-fashioned about alcohol and tobacco.

But buy this book. The line drawings alone are worth the price of admission and as entertainment the text itself is admirable. The expectant father, too, will enjoy reading it and will get some sound if commonplace advice on such matters as choosing his home and saving his money.

J. Rosslyn Earp, M.D.
New York State Department of Health

SUMMER ROUND-UP

A pamphlet, "The Summer Round-up of the Children"—giving the purpose, program, and policies of the summer round-up and suggestions for organizing and carrying on its health activities—is available from the National Congress of Parents and Teachers, 1201 Sixteenth Street, N.W., Washington, D.C.

THE NEED FOR A NATIONAL HEALTH PROGRAM

Report of the Technical Committee on Medical Care, Interdepartmental Committee to Coördinate Health and Welfare Activities, Washington, D.C., 1938. 36 pp.

The cost to society of preventable illness and death and the need for adequate medical care for the economically underprivileged are highlights in a report of the committee appointed by the President to make a survey of the nation's health. The report, which has already received wide editorial comment since its release in February, summarizes the accomplishments of the past century in disease prevention and control and defines the unmet needs of the present. These needs divide themselves into two general classifications: (1) needs in respect to maternity, infancy, and childhood, in which are included our high maternal mortality rate, the death rate of infants under one month of age, and the disabling illness among children due to such conditions as the acute communicable diseases, respiratory diseases, poliomyelitis, rheumatic heart disease, and correctable defects; (2) needs not directly associated with child-bearing or with the hazards of early life, including tuberculosis, syphilis, pneumonia, malaria, diabetes, mental disease, cancer, other diseases of middle and old age, and industrial hazards.

Evidence is cited from various surveys, including the recent National Health Survey made by the United States Public Health Service, to show the close association between poverty and illness and the fact that although there is more disabling illness among those of low income, they receive the least medical care.

The economic problems of illness are divided by the report under two headings: the need for some plan for a distribution of the costs of medical care for people of moderate incomes; the need for larger financial support for the care of those unable to afford such care.

Attention is called to the uneven distribution and in many cases lack of personnel and facilities for health service, including nursing care. The report refers especially to the poor distribution of private duty nurses—with an oversupply in cities and a shortage in rural areas—and the definite shortage of public health nurses in proportion to the needs of the population, particularly in relation to maternal and child care. It emphasizes the dual problem of the training of personnel and the need for funds for employing nurses. (For editorial comment, see page 271.)

The conclusion is drawn that: "The effective distribution and utilization of health and medical services requires a national plan for the economic application of our resources in maintaining and improving health." P.P.

SYPHILIS, GONORRHEA AND PUBLIC HEALTH

By Nels A. Nelson, M.D., and Gladys L. Crain. 376pp. The Macmillan Company, New York, 1938. $3.

This book contains the assembled information on syphilis and gonorrhea and

is one of the most practical and realistic books on the subject. Nurses and other public health workers will find it tremendously helpful in their work.

Immunity, relapse, superinfection, and reinfection are at long last explained in simple language. The chapters on the program and its administration are excellent and practical. The book gives a wealth of detailed information on diagnosis and treatment of syphilis and gonorrhea, with a description of the anatomical structures and physiological functions involved. The important and interesting subjects of congenital syphilis and gonococcal infections in children are fully discussed. The book answers many ever-recurring questions that are asked by workers in this field. It is abundantly indexed, and the references given at the end of each chapter are exceedingly helpful.

It is recommended that a copy of this book be in every clinic and health center concerned with the prevention and treatment of these diseases.

NADINE B. GEITZ, R.N.
The American Social Hygiene Association

RECENT PUBLICATIONS AND CURRENT PERIODICALS

MATERNITY CARE

CAUSES OF MATERNITY MORTALITY. Martha M. Eliot, M.D. *The Child,* October 1937, p. 71.

ALONG THE PATH TO PARENTHOOD. An Outline for Classes in Motherhood. State Department of Health, Division of Child Health and Health Education, Des Moines, Iowa, March 1937. 5c.

This outline of seven lessons has been prepared for women's classes. It includes the content material for the lessons but not suggestions for teaching methods.

TO MOTHERS AND FATHERS. Maternity Center Division of the Visiting Nurse Association, 138 South Oxford Street, Brooklyn, N. Y. 5c.

Another leaflet of information for expectant fathers and mothers. It is a brief presentation of essential facts in a form inexpensive enough to make wide distribution possible. Such leaflets are valuable educationally in promoting maternal health.

INFANT AND PRESCHOOL CHILD

INFANT MORTALITY IN THE UNITED STATES. *The Child,* September 1937, p. 59.

Figures based on the year 1935.

HOW TO TRAIN YOUR CHILD. Ethel B. Wright. *National Parent-Teacher,* 1201 Sixteenth Street, Northwest, Washington, D.C., October 1937, p. 17.

When should a baby be trained in regard to elimination? What is the best way to train him? Ideas on this subject have changed recently, and nurses will be interested in this practical discussion.

THE PREMATURE INFANT. L. T. Meiks, M.D. *The American Journal of Nursing,* May 1937, p. 457.

THE PREMATURE INFANT IN THE HOSPITAL. Mary L. Greve. *The American Journal of Nursing,* May 1937, p. 462.

THE PREMATURE INFANT AT HOME. Evelyn C. Lundeen. *The American Journal of Nursing,* May 1937, p. 466.

WHEN YOUR BABY'S TEETHING. Emelyn Lincoln Coolidge, M.D. *Parents' Magazine,* February 1938, p. 21.

Do all babies have discomfort with teething? What shall I advise the mother whose baby is fretful while teething? These and other problems of teething-time are discussed here.

PLAY SCHOOL FOR THE VERY YOUNG. Ruby Mack Bush. *Parents' Magazine,* November 1937, p. 28.

Describes the development of a play school in a town where there was no kindergarten or nursery school.

OUR CHILDREN IN A CHANGING WORLD. An Outline of Practical Guidance. Erwin Wexburg, M.D., with Henry E. Fritsch. The Macmillan Company, New York, 1937. 232pp. $2.

NURSING SERVICES FOR MOTHERS AND CHILDREN AS PART OF A BALANCED PUBLIC HEALTH NURSING PROGRAM. Hortense Hilbert. *American Journal of Public Health,* September 1937, p. 875.

Discusses the development of services in relation to needs. Emphasizes the importance of adequate supervision.

A Sketch of the Life of Florence Nightingale by Rosalind Nash is reviewed on page 309.

• A National Committee on Better Care for Mothers and Babies was formed in Washington, D.C., on March 12, 1938, with 61 organizations represented. The formulation of the Committee followed upon the nationwide Conference on Better Care for Mothers and Babies which met in Washington on January 17 and 18 at the call of the U. S. Children's Bureau to canvass the available resources for meeting the problem of needless maternal and infant deaths. The Committee elected the following officers:

Chairman, Harriet Elliott
Vice-Chairman, Fred L. Adair, M.D.
Secretary, Mrs. Nathan Straus
Treasurer, R. H. Riley, M.D.

The Committee adopted bylaws which defined its immediate objective as: To furnish material for study, and otherwise to assist in the effort to increase public interest in better care for mothers and babies, and also to study legislation which may be proposed for the advancement of this work.

• The twenty-seventh annual meeting of the Canadian Public Health Association will be held in Halifax, N.S., June 20-22.

• A proposed plan for the study of medical care by state and local medical societies, prepared by the Bureau of Medical Economics of the American Medical Association, was published in the *Journal of the American Medical Association* for February 12, 1938. In accordance with a recent resolution adopted by the Board of Trustees, the American Medical Association is encouraging state and local medical societies to "collect information concerning medical needs and to formulate preferable procedures to supply these needs in accordance with established policies and local conditions." The objectives, procedure, and proposed scope of such a study are included in the outline. The needs of the indigent and the low-income group for medical care are a primary concern of the study. Reports of such local studies are to be sent to the American Medical Association.

• National Social Hygiene Day this year proved unusually successful in arousing public interest in the control of syphilis. Returns to the American Social Hygiene Association indicate that approximately three thousand meetings were held during February to consider social hygiene problems. Nearly three hundred local radio stations took part in the Social Hygiene Day program, and the newspapers also played an important part in this campaign to stimulate interest in syphilis control.

• Boys and Girls Week will be observed from April 30 to May 7, inclusive. Its purpose is to focus attention upon the problems, activities, and training of boys and girls, and to enlist the aid of everyone in a year-round program for the development and preservation of character in the coming generation. Suggestions for local community programs may be secured from the National Boys and Girls Week Committee for the United States, 35 East Wacker Drive, Chicago, Ill.

• The first law to be enacted anywhere with the object of protecting the unborn child from congenital syphilis became effective on March 18 when Herbert Lehman, Governor of the State of New York, signed the Twomey-Newell Bill. This bill requires all persons licensed to attend women in pregnancy to admin-

ister or cause to have administered a standard serological test for syphilis and to indicate on the birth or stillbirth certificate if such a test was made. If the test has not been made, the reason for the omission must be shown, but the law provides that results of such tests should not be indicated on the birth certificate. Since the diagnosis of syphilis in the mother is the first step in a program of treatment to prevent the disease in the baby, it is believed that this law will have far-reaching effects in the eradication of congenital syphilis and the reduction of infant mortality from this cause.

• The first international broadcast on any health problem will be heard over the National Broadcasting Company, WEAF and the Red Network, on Monday evening, May 2, at 7:30 Eastern Daylight Saving Time. The broadcast, which is arranged by the American Heart Association, is planned as an observance of National Child Health Day.

Speakers will be Lord Thomas Jeeves Horder, Physician-in-ordinary to the King of England; Dr. Homer F. Swift of the Rockefeller Institute in New York City; Dr. T. Duckett Jones of the House of the Good Samaritan, Boston; and Dr. William J. Kerr, President of the American Heart Association. The purpose of the broadcast is to acquaint doctors, and also parents and teachers, with the serious problem of rheumatic heart disease.

• The December issue of the *Journal of Social Hygiene* was a souvenir number of the testimonial dinner given in honor of Dr. William Freeman Snow, general director of The American Social Hygiene Association, on October 1.

• Visitors to New York as well as those of us who live here will find a visit to the New York Museum of Science and Industry located here at 50 West 50 Street, very worth while. The present exhibit is of special interest to public health nurses. Here are found working models of the human body, and exhibits that show how nature heals a wound and how blood is typed for transfusion. And last but not least, there is the transparent man. When you come to visit N.O.P.H.N. headquarters, stop in on the first floor and spend some time in the Museum.

• A new Council on Industrial Health established by the American Medical Association held its first meeting on December 10, 1937. The purpose of the Council, according to the *Journal of the American Medical Association,* is to concern itself with matters pertaining to the control and prevention of occupational disease.

• "Social Education" will be the theme of the 1938 Stanford Education Conference to be held at Stanford University, California, July 6-10. Among the leaders who will take part are William H. Kilpatrick, Emeritus Professor of Education, Columbia University; Lewis Mumford, author and lecturer; William Ogburn, Professor of Sociology, University of Chicago; and Ray Lyman Wilbur, President of Stanford University.

On July 5 and 6 at the same place a Conference on Early Childhood Education will be held to commemorate the one hundredth anniversary of the founding of the kindergarten. Among the leaders for this conference will be Winifred Bain, New College, Columbia University; Julia L. Hahn, Supervising Principal, Washington, D. C.; William H. Kilpatrick; and Lois Meek, Professor of Education, Columbia University.

Information as to fees and other details may be secured by writing to Stanford Education Conference, Stanford University, California.

• The annual meeting of the Missouri State Nurses' Association will be held in the Masonic Temple at Kirksville on October 17, 18, and 19.

• An announcement was made in *The Child* for December 1937 of the appointment of a Special Advisory Committee on Public Health Nursing to serve in a consultative capacity on aspects of the public health nursing program of the Children's Bureau as it relates to maternal and child health services and services for crippled children carried on in the states under the Social Security Act.

The chairman of the committee is Katharine Tucker, Director of the Department of Nursing Education, University of Pennsylvania. As members of the General Advisory Committee, Amelia Grant, President of the National Organization for Public Health Nursing, and Hazel Corbin, General Director of the Maternity Center Association, become ex officio members of the new committee. Other committee members are: Shirley C. Titus, School of Nursing, Vanderbilt University, Nashville, Tenn.; Elizabeth G. Fox, Executive Director, New Haven Visiting Nurse Association, New Haven, Conn.; Marian W. Sheahan, Director, Division of Public Health Nursing, New York State Department of Health; Mrs. Abbie Weaver, Director, Public Health Nursing Service, Department of Public Health, Atlanta, Ga.; Florence L. Phenix, Assistant Director, Crippled Children's Division, Department of Public Instruction, Madison, Wis.; Winifred Rand, Merrill-Palmer School, Detroit, Mich.

• A $3500 nationwide poster contest, open to all public and parochial school children above the third grade, has been launched by the American Dental Association. The prizes vary from silver cups and encyclopedias, which are the grand awards, to cash prizes, camping trips, and other prizes offered by state and local dental societies. Awards will be given for the best posters illustrating phases of dental health such as proper diet, exercise of teeth and jaws, mouth cleanliness, and preventive dentistry. The winning posters will be exhibited at the annual meeting of the Association in St. Louis, Mo., October 24-28. Information regarding the contest may be secured from the American Dental Association, 212 East Superior Street, Chicago, Ill.

• The ceremonies for unveiling the monument in the Army and Navy Nurse Corps Section of the Arlington National Cemetery which were to have taken place on May 11 have been postponed until next November owing to an unavoidable emergency connected with the cutting of the marble.

• The New England Health Education Association will hold its thirteenth annual conference on June 3 and 4 in the Pratt Building of Naval Architecture in Cambridge, Mass.

J.V.S. APPOINTMENTS

(Continued from page 324)

Rose Guralnick, Henry Street Visiting Nurse Service, New York, N. Y.

ASSISTED PLACEMENTS

Margaret A. Cree, Supervising Public Health Nurse, State Department of Public Health, San Francisco, Calif.

Mrs. Alice G. Kraft, Assistant State Supervisor of Public Health Nursing, State Department of Health, Bismarck, N. Dak.

Evelyn Sutherland, District Supervising Nurse, State Department of Health, Albany, N. Y.

Mrs. Elizabeth B. Worrall, Supervising Nurse, Community Health Society of Central Delaware County, Swarthmore, Pa.

Pauline Naegely, Supervising Nurse, Lycoming County Chapter, American Red Cross, Public Health Nursing Service, Williamsport, Pa.

Addie Warner, General Duty Nurse, Orange Memorial Hospital, Orange, N. J.

OTHER NEW APPOINTMENTS

Henrietta Weber, Assistant Supervisor, Visiting Nurse Association, Yonkers, N. Y.

Noreita M. Alvis, Itinerant Nurse, American Red Cross, Orange County, Vt.

Mary E. Beam, Red Cross Nursing Field Representative for the State of New Jersey.

Hazel V. Dudley, Red Cross Nursing Field Representative for the State of Connecticut.

Our Readers Say . . .

THIS COLUMN is being initiated as a forum for the expression of comments and opinions from our readers (see editorial, page 270). Only signed letters will be published, although the signature will not be used except with the writer's permission. The N.O.P.H.N. is not responsible for opinions expressed in this column.

BETTER CARE FOR MOTHERS AND BABIES

To the Editor: In the February issue of PUBLIC HEALTH NURSING there appeared the report of the gathering together, at Washington, D. C., of five hundred delegates from all over the country. These delegates had assembled at the call of the Children's Bureau to consider the problem of better care for mothers and babies. This report is of great interest to all public health workers. To those of us who are struggling with this very problem in our various cities and towns it is hard to catch the spark with our short wave sets—affected as they are by all sorts of local interference. We feel, and have felt for the past ten years, the terrible struggle of the families with whom we are working. We know how most of the women in the great middle class think with fear of every new pregnancy. We know that the boys and girls who marry without financial security—in all classes of society—cannot look forward to a happy parenthood. We also know that the older generation look with disapproval at the young people who are determined to take a chance and have a family whether they can afford it or not.

If the mothers and babies in our care are to have their chance, what are we, the public health workers, going to do for these young people?

All of our authorities on maternal care are agreed that the expectant mother should be properly fed, that she should have ordinary physical comfort during her pregnancy, and that she should not be harassed by fear of what is to become of her and her baby at the time of her delivery. And yet hospitalization, which in these cases is the only chance of adequate care (because of home conditions) is out of the question without the aid of charity.

Public welfare boards in the greater number of cities and towns rule against hospitalization for maternity cases except for medical emergencies. For families who are not on the public welfare, who are living on a wholly inadequate income, the situation is even worse, for they must remain at home or face a debt that is insurmountable. The cost of medical care, with all of its ramifications, affects the expectant mother and her baby during all of her pregnancy and postpartum period.

And so we ask ourselves what are we, who are working with these families day by day, going to do about it?

It is of no use for us to talk about standards of maternal care unless we can help our patients to get such care. With the arrival of the baby the physician advises what are the essentials for the infant's health and development. And the nurse going into the home sees how inadequate is the family income and tries to measure what part of it can be spent on the new baby. The rent must be paid and other members of the family must be fed and clothed. Where, then, is the money to come from to supply Grade A milk, oranges, cod-liver oil, and fresh vegetables?

Mayor La Guardia has said that what we need is money. Money for what? For specialists, to teach standards of maternal care? Or for the families, so that they can afford proper medical care without the loss of that most precious possession, their self-respect.

Dr. Parran assures us that no problem in family health can be isolated from other problems. This we know to be true. But again arises the question: What are we to do about it? And how? We have reason for the belief that, as years go on, the social security program will be able to solve many of these urgent problems—for it is evident that good social planning, including the federal, state, and local community, is the real answer for the future. And it is important that we should all do our utmost to lay the foundation stones for this social security.

However, we must live and work with the present conditions. And I am sure that I voice the feelings of many of my fellow workers when I say that we need help and encouragement to hand on to the expectant mothers of *this* generation in order that *their* babies may come into a world that wants them and is ready to give to each baby a fair start in life.

ELIZABETH ROSS, R.N.
Director of Health Center,
The Brookline Friendly Society
Brookline, Massachusetts